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INSTRUCTION
OF THE
DEAF AND DUMB;
OR,
A THEORETICAL AND PRACTICAL
VIEW

OF THE MEANS BY WHICH THEY ARE TAUGHT TO SPEAK
AND UNDERSTAND A LANGUAGE;

CONTAINING HINTS FOR THE CORRECTION OF
IMPEDIMENTS IN SPEECH:

Together with

A VOCABULARY

*Illustrated by numerous Copperplates, representing the most common
Objects necessary to be named by Beginners.*

BY JOSEPH WATSON, L.L. D.

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INTRODUCTION.

TO be born deaf, or to lose the hearing at an early age, before the habit of speaking is so confirmed, or the stock of articulate language so copious, as very powerfully to impress the memory, is invariably followed by *Dumbness*. Not, certainly, as some writers have affirmed, on account of any sympathy between the organ of hearing and the organs of speech, by which the disease or defect of the former is transferred to the latter. Were this the case, Dumb people could not be taught to speak. Total dumbness seldom

proceeds from any other cause than the want of hearing, or the want of intellect: at least, in no case have I ever met with it, except proceeding from the one or the other of these privations: so rarely is imperfection in the organs of speech the cause of it.

Want of hearing from birth, or from an early age, is followed by dumbness, (if the intellects are perfect,) merely because it precludes the opportunity of learning, or being confirmed in the use of, speech, in the ordinary way. Dumbness, where the hearing is perfect, and the intellect defective, (no uncommon case,) proceeds from want of ideas, and of judgment to direct the organs of speech in the formation of articulations.

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The causes of what may be properly termed original deafness, or the defect in the organ of hearing, with which so many of our species are unfortunately born, are little, if at all, known. Here I cannot resist the temptation of transcribing a page or two from Dr. Paley*, in order to give a general idea of the structure and uses of the component parts of the ear. The description is at once so satisfactory, and yet so popular, and free from technical obscurity, that I am persuaded no reader will be offended by its insertion; though I hope the book from whence it is borrowed, forms a part of almost every one's reading.

* Natural Theology, p.p. 46—51.

“The ear, it is probable, (says he,) is no less artificially and mechanically adapted to its office, than the eye. But we know less about it: we do not so well understand the action, the use, or the mutual dependency of its internal parts. Its general form, however, both external, and internal, is sufficient to show that it is an instrument adapted to the reception of *sound*; that is to say, already knowing that sound consists of pulses of the air, we perceive, in the structure of the ear, a suitability to receive impressions from this species of action, and to propagate these impressions to the brain. For of what does this structure consist? An external ear, (the concha,) calculated, like an ear-trumpet,

to

to catch and collect the pulses of which we have spoken; in large quadrupeds, turning to the sound, and possessing a configuration, as well as motion, evidently fitted for the office: of a tube which leads into the head, lying at the root of this outward ear, the folds and sinuses thereof tending and conducting the air towards it: of a thin membrane, like the pelt of a drum, stretched across this passage by a bony rim: of a chain of moveable, and infinitely curious, bones, forming a communication, and the only communication that can be observed, between the membrane last mentioned and the interior channels and recesses of the skull: of cavities, similar in shape and form to wind instruments of music,

being spiral or portions of circles: of the eustachian tube, like the hole in a drum, to let the air pass freely into and out of the barrel of the ear, as the covering membrane vibrates, or as the temperature may be altered: the whole labyrinth hewn out of a rock: that is, wrought into the substance of the hardest bone in the body. This assemblage of connected parts constitutes together an apparatus, plainly enough relative to the transmission of sound, or of the impulses received from sound, and only to be lamented in not being better understood.

“The communication within, formed by the small bones of the ear, is, to look upon, more like what we are accustomed to call machinery, than any thing I am
acquainted

acquainted with in animal bodies. It seems evidently designed to continue towards the sensorium the tremulous motions which are excited in the membrane of the tympanum, or what is better known by the name of the 'drum of the ear.' The compages of bones consists of four, which are so disposed, and so hinge upon one another, as that, if the membrane, the drum of the ear, vibrate, all the four are put in motion together; and, by the result of their action, work the base of that which is the last in the series, upon an aperture which it closes, and upon which it plays, and which aperture opens into the tortuous canals that lead to the brain. This last bone of the four is called the *stapes*. The office of the
drum

drum of the ear is to spread out an extended surface, capable of receiving the impressions of sound, and of being put by them into a state of vibration. The office of the *stapes* is to repeat these vibrations. It is a repeating frigate, stationed more within the line. From which account of its action may be understood how the sensation of sound will be excited, by any thing which communicates a vibratory motion to the *stapes*, though not, as in all ordinary cases, through the intervention of the *membrana tympani*. This is done by solid bodies applied to the bones of the skull, as by a metal bar holden at one end between the teeth, and touching at the other end a tremulous body. It likewise

likewise appears to be done, in a considerable degree, by the air itself, even when this membrane, the drum of the ear, is greatly damaged. Either in the natural or preternatural state of the organ, the use of the chain of bones is to propagate the impulse in a direction towards the brain, and to propagate it with the advantage of a lever; which advantage consists in increasing the force and strength of the vibration, and at the same time diminishing the space through which it oscillates: both of which changes may augment or facilitate the still deeper action of the auditory nerves.

“ The benefit of the eustachian tube to the organ may be made out upon known pneumatic principles. Behind the drum
of

of the ear is a second cavity; or barrel, called the *tympanum*. The eustachian tube is a slender pipe, but sufficient for the passage of air, leading from this cavity into the back part of the mouth. Now it would not have done to have had a vacuum in this cavity; for, in that case, the pressure of the atmosphere from without would have burst the membrane which covered it. Nor would it have done to have filled the cavity with lymph, or any other secretion; which would necessarily have obstructed both the vibration of the membrane, and the play of the small bones. Nor, lastly, would it have done to have occupied the space with confined air, because the expansion of that air by heat, or
its

its contraction by cold, would have distended or relaxed the covering membrane, in a degree inconsistent with the purpose it was assigned to execute. The only remaining expedient, and that for which the eustachian tube serves, is to open to this cavity a communication with the external ear. In one word; it exactly answers the purpose of the hole in a drum.

“The *membrana tympani* itself likewise deserves all the examination which can be made of it. It is not found in the ears of fish; which furnishes an additional proof of what indeed is indicated by every thing about it, that it is appropriated to the action of air, or of an elastic medium. It bears an obvious resemblance

resemblance to the pelt or head of a drum, from which it takes its name. It resembles also a drum-head in this principal property, that its use depends upon its tension. *Tension* is the state essential to it. Now we know that, in a drum, the pelt is carried over a hoop, and braced as occasion requires, by the means of strings attached to its circumference. In the membrane of the ear, the same purpose is provided for, more simply, but not less mechanically, nor less successfully, by a different expedient, viz. by the end of a bone (the handle of the *malleus*) pressing upon its centre. It is only in very large animals that the texture of this membrane can be discerned."

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The foregoing account being duly considered (though given by its author for the illustration of a different principle than that to which I mean to apply it), it will cease to be a matter of wonder, that an organ so delicate and complex as the internal ear, should occasionally be deranged: and, who that reflects on its situation, can expect that its derangement should be generally discovered, or remedied, even by the most expert operators. For, not only must they operate upon parts incomparably irritable, in the immediate vicinity of the brain itself; but they must operate in the dark. In no instance of original deafness, that has come under my notice, has there been any visible imperfection in the external ear

ear. When a child is born deaf, therefore, or totally loses its hearing, there remains nothing for those to whom nature or Providence has confided the care of it, but patient acquiescence in the defect; or, which happily has been found practicable, to substitute the perceptions through other senses, to supply the loss as far as respects the acquisition of speech and language.

The generous and humane attention of the British public, to that unfortunate class of persons, the *indigent* DEAF and DUMB, (too long overlooked or ineffectually commiserated among us,) has, of late years, been strongly manifested. And, it may be fairly presumed, that those unacquainted with the method of
education

education by which relief can be afforded, to persons labouring under dumbness and ignorance, in consequence of deafness, will gladly embrace any information on the subject. While this may gratify the laudable curiosity of the general inquirer, a hope may be entertained of its being instrumental in accelerating the final removal of that prejudice which had so long consigned the **DEAF** and **DUMB** to the class of semi-rationals, in the estimation of the majority of mankind.

Persons born deaf are, in fact, neither depressed below, nor raised above, the general scale of human nature, as regards their dispositions and powers, either of body or mind. They are human beings,
b individually

individually differing from their kind, only by an accidental defect: this defect is not such as to disturb the course of nature in the first stage of the growth of the mental faculties, though, while it operates as a bar to the acquisition of language, it retards, and almost precludes their expansion, after this stage. (See page 130.) Give them language, and you, in a great measure do away their defect, and bring them on a level with those of their age and station in life. Thus the tendency of information on the subject of their instruction will be, gradually, to lessen the number of *blanks* in society, and to diminish the burthens of it, by transforming them into efficient and useful members. Let it be remembered also,

also, that every member thus added is individually benefited, by as much as moral and intellectual existence exceeds the mere animal. The bare conjecture of how many may have been lost to society, and to themselves, through the prejudice just mentioned, may well excite the most lively emotions of compassion and regret. It may seem strange, but it is nevertheless very true, that persons, of high classical and scientific attainments, do, often, express astonishment, that any thing can possibly be done in the way of educating the Deaf and Dumb. Men, in general, are too partial, it should seem, to the medium through which they, themselves, have come by their mental acquirements, and too apt

to underrate the value of another medium. Indeed, for want of due investigation into the sources of our ideas, and the means by which words have a value with us, in expressing these ideas, &c. we are ready to think there is something spiritual and enlightening in the sense of hearing, which, in truth, resides not in hearing, as such, but in language, of which hearing is only the inlet, with those who possess it. That language may, to an indefinite degree, be the object of another sense, is daily proved by experience. And why it is, and may be so, I hope to have made appear. For, if I have succeeded in my intention, the principles upon which the instruction of the Deaf and Dumb depend, have been developed in
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the following pages: and examples of the application of those principles have been furnished, sufficient to bring the subject within the comprehension of those who may deem it worthy of their attention. If there should appear less of brilliancy and profundity in them, than some may have been led to expect, I have no other apology to offer than the nature of the subject. My object was not to dazzle, and to surprise, by an extraordinary display of instantaneous and marvellous effects; but to lead the reader into a situation where he might discern *how*, by a patient and persevering imitation of nature, important results might be brought about.

Brevity has been a leading point with

me, from necessity*; but yet I hope obscurity has been avoided, and nothing material omitted. For this reason, chiefly, I have not thought it incumbent on me to give any thing like a history of the discovery and practice of the science of teaching the Deaf and Dumb. Suffice it to say, that our learned countryman, Dr. John Wallis, near a hundred and fifty years ago, taught “a person *dumb* and *deaf* to speak and to understand a language,” (I use his own words, in a letter to Robert Boyle, Esq.) upon principles

* Of how much importance time must be to one engaged in superintending the education of between seventy and eighty deaf scholars, may safely be left to the determination of the reader.

such as I have endeavoured to unfold. Various other persons in this country, at different periods, since his time, have made attempts of the same sort, with unequal success. But, as far as I know, the late Mr. Thomas Braidwood, formerly of Edinburgh, and latterly, till his death, in 1806, of Hackney, near London, was the first who kept a regular academy in this island, for the instruction of the Deaf and Dumb*. His method was founded upon the same principles; and his indefatigable industry and great success, would claim from me respectful notice,

* It was here, in the year 1784, that my resolution was finally taken, to embrace the instruction of the Deaf and Dumb, as a profession.

even if I could forget the ties of blood and friendship.

When I say that these, my venerable predecessors in the arduous, but yet pleasing, undertaking, of teaching the Deaf and Dumb, taught upon the same principles which I have attempted to explain, I do not, by any means, intend to convey, that, in their practice, they were guided by the light of these principles embodied into a regular theory: my meaning is, that their practice accorded with, was explicable by, and referable to, these principles.

The instruction of the Deaf and Dumb being no longer problematical, but reduced into regular and successful method, the rich who could afford the expence,
were,

were, in general, ready to bestow an education on their children. I say, in general, for such was (and perhaps is, though I hope it will not long continue so) the force of an unreasonable apprehension of their incapacity to learn, that parents, with the best intentions, have been found seriously to balance, whether they should best perform their duty to a Deaf and Dumb child, by hoarding a sum of money that might be applied to its future maintenance, or by laying it out in its education. But the exercise of this art being confined to a few professors, the poor were necessarily, in a great measure, excluded from a participation of its advantages. Their friends could not defray the expence of removing them to
a great

a great distance from their homes, and supporting them there, even supposing any individual could have been found, (which could not be expected,) who would have, gratuitously and exclusively, devoted his time and his talents to their instruction. This strongly pointed out the necessity of a public institution for the reception of such persons, where the expence attending their support and education might be provided for. This was, indeed, thought of, in this country, about thirty years ago; and some few inefficient steps were taken towards its accomplishment*.

It

* The late Mr. Braidwood informed me that the undertaking had been mentioned to His Majesty, something about the period referred to, who had graciously
countenanced

It continued to be a subject of conversation, and, the non-accomplishment of it a matter of regret, to many who had opportunities of observing how beneficial such an institution might prove, till the year 1792*, when the society was

countenanced the proposition by paying into the hands of a banker the sum of 100*l.* or *guineas*, as a royal donation towards carrying it into effect. But here the matter languished, and nothing further came of it.

* It is rather a singular and curious fact, that precisely about the same time several individuals, wholly unknown to each other, should have been seriously resolved upon attempting the formation of such a society. That this was actually the case I can assert, from personal knowledge; and that some progress was made by each, before he knew of the other's design. That they all cordially united when that was known, need hardly be added.

The

was formed, that opened the present Afylum. Of the good that has been done by it, *I*, perhaps, ought not to speak; yet it would be sinning against the most noble trait of human benevolence and charity, to be silent, when the condition
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The Rev. John Townsend has, however, the undisputed honour of first giving his name to the public, as an active promoter of this Institution. Posterity will do him justice: he still lives its active and energetic pleader. He was joined, at the outset, by his friend, the late Rev. Henry Cox Mason, who died rector of Bermondsey, 1803. Mr. Mason's heart and soul were in the undertaking from the first; but his attachment to it seemed to increase, as he saw more and more of the advantages it conferred, and the increasing numbers that applied for admission to participate in these advantages. The energies of his mind, and the exertions of his body, were devoted to the augmentation of the list of its supporters, till within a few weeks of his death;
and,

of so many, otherwise hopeless and helpless, fellow beings, has been materially ameliorated:—might I not rather say, that they have been changed into a sort of new beings, and elevated in the scale of existence!

The hand of public charity has done in

and, to his memory much is due by every well-wisher to the ASYLUM for the DEAF and DUMB.

In November, 1792, it was opened by the admission of six children; the number has been gradually increasing (some going out every year, after the first four or five) to the present time, (1809,) it now amounts to near seventy. But the admissions have been so far from keeping pace with the applications, that more than the number actually received are now on the list as expectants: such is the known extent of this calamity. It is difficult to form an exact calculation; but there is every reason to think that it extends far beyond what is known.

Britain,

Britain, what it required the munificence of kings, and emperors, and the act of a legislature, to do in foreign countries,—provided for the gratuitous education of the *indigent* Deaf and Dumb.

On the continent of Europe we have some traces of this art being practised with success, as early as the year 1620, particularly in Spain; and various professors in different parts of the continent, exercised it at subsequent periods. But it was reserved for the celebrated Abbé de l'Epeè, at Paris, to spread his fame, and to draw the attention of mankind to his method of teaching, in a degree far surpassing any of his predecessors or contemporaries. To those who have read an account of his method (and who has not?

not?

not? for it has been the fashion for many years past, for every traveller who has visited Paris, and favoured the world with an account of that city to say something on this subject) it will appear that I have passed a heavy censure on it. (Page 84.) Truth, however, is more to be respected than the greatest name: I must have declared my conviction and experience, even at the risk of standing singly opposed to the authority of the good Abbé and his numerous admirers.

But, his successor, *l'Abbe Sicard*, in his book, (*Cours d'Instruction d'un Sourd-muet, à Paris*, 1803,) has relieved me from much of the anxiety I might otherwise have felt upon this score. He; there, among praises almost amounting
to

to worship of his predecessor, asks: "But, why did he (De l'Epeè) not exercise his scholars in composing sentences, themselves? why did he always dictate to them both the questions and answers?" and adds, "it was because he (De l'Epeè) thought nothing more could be required of them," (than to copy what was dictated.) "This," says the *Abbé Sicard*, after some additional observations to the same effect, "is the answer to the complaints of parents, who, seeing their children, again, after their education, flattered themselves that they would be able to communicate with them by writing; and who obtained from them, only, a *yes* or a *no*, without these unfortunates ever knowing how to put a single question

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tion of their own accord, or answer by more than one word to *those* put to them*.” In a letter, apparently confidentially addressed by the Abbé de l’Epee to the Abbé Sicard, his then intended successor, and published by the latter, respecting the management of his pupils, he says, “Do not hope that they may

* Mais pourquoi n’exerçoit-il pas ses élèves à composer eux memes des phrases? pourquoi leur dictoit-il toujours et les questions et les reponses? C’est qu’il ne pensoit pas qu’on pût jamais exiger d’eux d’autre travail. (*See Discours Preliminaire*, page 40.) C’est ici la reponse aux plaintes des parens qui revoyant leurs enfans après leur education, se flattoient qu’ils pourroient communiquer avec eux, par ecrit, et qui n’en obtenoient qu’un *oui* ou qu’un *non*, sans que jamais ces infortunés sussent faire une seule question d’eux memes, ou repondre par plus d’un mot à celles qu’on leur adressoit. (*Ib.* 41, 42.)

ever be able to communicate their ideas by writing*." If this be the true estimate of the Abbé de l'Epeè's system, it can only be regarded as one of those unsubstantial meteors that blaze and are extinct, by the glare of which mankind are often strangely dazzled. Of his benevolence and good intention there can be no question; but he was a man, and therefore liable to error. He was, moreover, a man of genius, and a metaphysician; and to this latter circumstance, more, perhaps, than any other, if we couple his enthusiasm with it, we may attribute

* N'esperez pas qu'ils puissent jamais, rendre par écrit, leurs idées.

the errors of his system, and the *eclât* it obtained.

It may be expected that I should say something of the *Abbé Sicard's* system, as contained in his book; but my object is not criticism, and I have not leisure for analyzing a work of that extent. I shall only say, that I most approve of it where it most differs from that of his predecessor, and least, of course, where it least resembles that which all my experience, and the most mature reflection I am capable of, has led me firmly to adopt. If the method I have endeavoured to explain be duly acted upon, there will be no room to complain of want of success. Though it will be obvious to every one who attends to the subject with requisite consideration,

that to succeed, much patient and persevering industry, as well as judgment, will be required. Let no one attempt the instruction of the Deaf and Dumb, who cannot cordially embrace the motto, "*Labor ipse voluptas.*" The attention of a teacher should be ever on the watch to seize, and as far as possible to create, suitable occasions for the exemplification of his lessons: hence lessons, too, must frequently be framed for the occasions that present themselves, ever keeping in view the temper, dispositions, and capacity of the learner. The same examples and illustrations will by no means suit all learners; and the teacher who should depend upon such general instruction, would find himself miserably deceived.

I hope

I hope this will sufficiently explain why the examples have not been carried to any considerable extent in this short treatise.

I have found, by experience, that one deaf person may be employed to teach another with the happiest effect. So much so, that when I happen to be, for the moment, at a loss to make one of slow apprehension understand a lesson, I turn him over to one of his schoolfellows, who has learnt it; and never without advantage to both—for it is really true,—it is true of *all* indeed—as well as of the *deaf*, that

“ Teaching we learn, and giving we retain
The births of intellect ————— ”

Under

Under the heads, .ARTICULATION, WRITING, READING, and KNOWLEDGE of LANGUAGE, will be found such a view of the instruction of the Deaf and Dumb, as, I trust, may prove satisfactory to those, who, from motives of humanity, take an interest in their condition: and useful to those, who, by the ties of nature, are bound to seek means for their relief.

ARTICULATION.

OF ARTICULATION.

BEFORE I describe the means by which articulation is taught to the naturally Deaf and Dumb, it may be necessary to state and to answer an objection that has been made to the utility of it. It has been urged, that their utterance is monotonous, harsh, and unpleasing to the ear. This, however, is far from being strictly true in every case; for, where the organs of speech are perfect, and the voice clear, and sufficiently strong, deaf persons may be taught to speak, to read, and to converse, *vivæ vocè*, in a manner not unpleasing, though, for want of the ear to regulate the tones, there must be a peculiarity in their utterance. Allowance being made for this, it will be found that their speech is, in

numerous instances, abundantly intelligible to all who understand the tongue in which they speak, even to strangers. To those who are in habits of daily intercourse with them, it becomes so familiar, that it fully answers the leading purpose for which that gift was bestowed on man—the communication of his thoughts. That this may not rest upon the assertion of an individual, the incredulous are invited to see and hear my scholars, and then to judge for themselves. But, were the objection valid, still I could not give up articulation: for, independently of the advantages they derive from it, as members of the community, in their intercourse with their friends, or with their fellow-creatures at large, they derive great and incalculable benefit from it as individuals: so highly is it useful, as a medium, in the attainment
of

of an important end—the acquisition of language.

A profound writer* has well observed, that
“ words may be considered in four lights:

“ First, as impressions made upon the ear.

“ Secondly, as the actions of the organs of speech.

“ Thirdly, as impressions made upon the eye by characters. And,

“ Fourthly, as the actions of the hand in writing.”

These observations are made in illustration of this proposition: “ *Words and phrases must excite ideas in us by association; and they excite ideas in us by no other means.*” I am persuaded, that if every one who reads this,

* Hartley.

will carefully attend to the operations of his own mind, it will stand in need of no further illustration.

Instead, therefore, of transcribing the whole of the author's elucidation, or vainly attempting to give a better, I shall assume it as true, and draw this plain inference: the more numerous the means of association, the more perfect the recollection; or, in other terms, the more frequent the recurrence of words, and their corresponding ideas, to the mind. Thus, persons who have all the four means above enumerated, that is, who can *hear, speak, read, and write*, retain a discourse much better, and have far greater facility in *expressing themselves*, than persons possessing only two of them; that is, illiterate persons who can hear and speak, but who cannot read nor write. Now, as
deaf

deaf and dumb persons, educated without articulation, can only have two of the means, viz. the third and fourth; that is, the impressions made upon the eye by characters, and the action of the hand in writing; can it be questioned, that we render them an essential service by adding the actions of the organs of speech; a very powerful auxiliary, since by it, words become, as it were, a part of ourselves, and more immediately affect us?

But of this enough for the present: we shall have occasion to glance at it again, when speaking of communicating a knowledge of language to the Deaf and Dumb. We proceed, therefore, to give an idea of the process of teaching them articulation or speech.

The principal instruments in producing the sounds called the powers of the letters, and

in performing all speech, whatsoever, are the lungs, windpipe, and larynx, the tongue, the nostrils, the lips, and the various parts of the mouth.

By the lungs, through the windpipe, the air is drawn in, and the breath emitted, which furnishes, as it were, the raw material of voice or speech. Out of the various collisions of *this* arise all the varieties of sound, as well with respect to tone as to articulation. But this diversity does not proceed from the lungs themselves; from them no variation of sound proceeds, unless it be, that, in proportion to the more or less forcible emission of the breath, the voice is more or less strong and sonorous. The lungs are, in speech, what the bellows are in a musical organ. The varieties of grave and sharp tones have their rise, partly, in the trachea,
or

or windpipe; for in proportion as this tube is elongated or narrowed, or shortened and more dilated, so are sounds more sharp or grave; though the larynx (or knob that may be externally felt at the upper part of the throat, and is a cartilaginous and muscular organ,) is the chief instrument in producing all musical tones and modulations of voice. In proportion as its aperture is greater or less, so are the tones of the voice more or less grave or acute. The articulation of words, or the formation of the different letters, begins after the breath has been emitted through the larynx, and is performed by means of the external organs of speech; that is, the mouth, nostrils, tongue, teeth, and lips.

OF THE VOWELS.

The first step is to obtain a clear and distinct sound from the throat, (in a voice tolerably well-pitched; for this is our *materia loquelæ*,) as, of *a*, in the word *wall*, &c. To effect this, and to habituate the pupil to associate the sound which he is learning to form, with the figure of the letter which is to be its representative, this is distinctly traced upon paper, or any convenient tablet, and he is made to look at it for a minute or two: he then, if of acute intellect, will look up, with some anxiety in his countenance, as if he would ask what he is to do with it. The sound is then slowly and fully pronounced, and the learner made to observe, by his eyes, the position and
motion

motion of the external organs of speech, and to *feel* the astriction of the muscles of the larynx, by placing his finger upon the throat, carefully making him perceive the difference to be felt there, between sound and silence. Having made these observations for a minute or two, he will seldom hesitate to attempt an imitation of what he has been observing; and that, for the most part, successfully. When the contrary is the case, nothing more is necessary than patient and good-natured perseverance; for if he perceive that his failure has excited chagrin or disappointment in his teacher, he will make another effort with great reluctance. The sound once acquired, must be practised sufficiently to avoid any danger of losing it; for the greatest care must be taken, all through his progress, never to proceed to a new sound till the
preceding

preceding has become familiar, and unattended with doubt as to the manner of producing it. A contrary practice would lead to endless vexation. A principal requisite is to keep the learner in good-humour, and to make him think that he is doing well beyond expectation: nothing is more discouraging than to put him back. In the same manner we proceed with the other simple sounds, *e*, *o*, *w**, one by one, till they are acquired. This being accomplished, we find little difficulty in the other vowels, which are compounded of these: thus, *i* is

* *W*, I make to represent the vocal sound heard in the word *book*. I am aware that it is not always considered as a vowel by our grammarians; but experience has abundantly satisfied me of its value; and the use of it will be seen more fully, when we come to speak of teaching the *Deaf* to read.

composed

composed of the open sound of *a* and the long sound of *e*; *u* is composed of *e* and *w*; *y*, when a vowel, is the same as *i*.

OF THE CONSONANTS.

The vowels being dispatched, we proceed to the consonants, in their order, teaching only the powers of them, and that, through the means of sight and feeling, as in the vowels; always applying the learner's finger to the muscles concerned in the formation, and inducing him to employ his eyes in observing the form of the letter, and the position and motion of the external organs of speech, alternately.

By the powers of the consonants, I mean the positions and actions of the several organs employed in their formation, without
the

the addition of any distinct vocal sound: for, though I shall frequently speak of sound in the throat, in their formation, it is to be understood as being so confined by the position of the organs, as not to partake of the nature of any of the sounds represented by the *vowels*.

B. P.

By closing the lips, sounding gently in the throat, forcing them asunder by the emission of the breath, and carefully avoiding to let any of it pass through the nose, we have the power of *b*; after the same manner is formed the power of *p*, but without sound in the throat.

C. K. G.

The power of *c*, or what is called its hard sound, is formed by raising the back part
of

of the tongue to the roof of the mouth, near the uvula, and forcing it away again rather quickly, by an emission of the breath, without sound in the throat. *K* is formed in the same manner as *c*; so is *g*, with the addition of sound in the throat.

D. T.

The power of *d* is produced by placing the tip of the tongue against the two rows of teeth, which are to be quite, or nearly shut, sounding in the throat, emitting the breath in removing the tongue from the teeth, and at the same time opening them a little. *T* has the same formation, only without sound in the throat.

F. V.

By placing the upper row of teeth upon the under lip, and gently emitting the breath,
without

without sound in the throat, we have the power of *f*. *V* has the same formation, with the addition of sound in the throat.

H.

H, is a mere emission of the breath, with the mouth a little open.

J.

J, has the power of *d* and *sh* combined.

L.

L is formed by raising the point of the tongue to the roof of the mouth, near the upper teeth, sounding in the throat, and suffering the breath to escape freely on each side of the tongue.

M, requires

M.

M, requires the lips to be closed, sound made in the throat, and the breath suffered to escape through the nose.

N.

The power of *n* is formed by raising and pressing the tongue to the palate, with the whole of its upper surface, so that no breath may escape but through the nose, the lips being kept open, and a gentle sound being made in the throat.

Q.

For *q*, join *k* and *w*.

R.

R is variously formed; but the surest and easiest way of teaching its power, to a deaf person,

person, is by elevating the fore-part of the tongue to the palate, and, with the assistance of the breath, causing a vibratory motion of it, accompanied with a gentle sound in the throat.

S. Z.

In forming *s*, place the tip of the tongue just below the under teeth, raise the sides of it to the palate, leaving a small aperture in the middle, through which the breath is to be forced, without sound in the throat, which will be intercepted by the teeth being shut, and form the hissing sound required: *z* requires the same position of the organs, with the addition of sound in the throat.

X.

X, is composed of *k* and *s*.

OF

OF DOUBLE CONSONANTS.

Such double consonants as *bt*, *br*, *cl*, *cr*, &c. require only to be run into each other, without changing their proper formations.

But there are other double consonants which have a power peculiar to their combined state, and therefore require to be particularly noticed; these are *ch*, *sh*, *th*, and *ng*.

CH.

Ch is composed of the powers of *t* and *sh*.

SH.

Sh has a power nearly resembling that of *s*, and requires a position of the organs something similar, except that the tip of the tongue

c

must

must be drawn back, instead of touching the gum and teeth; and the current of the breath emitted, must be intercepted by the under teeth, only in part, the rest must be suffered to escape between the rows of teeth, which must be a little opened for that purpose.

TH.

Th requires the tongue to be a little advanced between the two rows of teeth, and the breath emitted between it and the upper row, which must, nevertheless, be nearly in contact with it; this will produce the sound of *th*, as heard in the word *think*. It has another power, requiring precisely the same position of the organs, but with the addition of sound in the throat, heard in the word *this*, &c.

NG.

Ng represents a strong nasal sound; to form it the tongue is drawn back and raised to the roof of the mouth, towards the uvula, a sound made in the throat, and forced through the nose.

It is evident that when the power of a consonant is acquired, it needs only to be combined with the vowels to form syllables; as, *ba*, *ab*, &c. these the pupil pronounces almost at sight, as he does also *bab*, and any other combination of a vowel and consonant, or consonants, if well grounded in the foregoing formations of them. From the easiest combinations, we proceed to the most complex; and by practice acquire a readiness in pronouncing the longest polysyllables.

My object has been to convey a general idea of the process of teaching the *Dumb* to

speaking, to obviate a mistaken notion, that this process is attended with great pain to the pupil, rather than to enable the parents or friends of such persons to become their instructors. This, I am doubtful, is a work of too much labour and nicety to be generally practised.

But from what has been said it must be obvious, on a little reflection, that speaking is an operation depending, in a great measure, upon mechanical principles: and it may not be irrelevant here, nor wholly useless to many who have *not* the misfortune to be DEAF and DUMB, to make a few remarks on what are usually termed

IMPEDIMENTS IN SPEECH.

These may, in general, without descending to *minutiæ*, be divided into two classes:

STAMMERING,

STAMMERING, and the DEFECTIVE PRONUNCIATION OF SOME OF THE LETTERS. The former proceeds from a mental cause; the latter, frequently, from some imperfect organization. In each class there are, of course, varieties and degrees. We shall, in the first place, make a few observations on STAMMERING, by far the most unmanageable species of impediment.

Sometimes stammering takes place only in the utterance of such words as begin with certain letters; in general some of the labial or guttural consonants: as *b, p, m, c, g* &c. Some persons, on the contrary, stammer in the utterance of all words, indiscriminately, with whatever letter they begin, whether it be vowel or consonant—at certain times *only*: as, for instance, when the speaker is placed in any situation that occasions hurry, or embarrassment.

These hesitations proceed from a sudden interruption, or break, in the connexion of those sympathetic or linked (to use a plain word) muscular motions, that perform articulations in our ordinary discourse. This disseveration is not occasioned by any defect in the organs concerned in the formation of the sounds, for then it would operate uniformly; but by the influence which external objects, or circumstances, have on the mind. *Fear, shame*, or any other strong internal feeling, will, for the moment, produce faltering and hesitation in speech, even in those who do not habitually stammer. Agreeably to this, we find that persons of great nervous irritability, and lively consciousness, are most liable to stammering. This sort of impediment is, in fact, a bad habit, founded upon this constitutional susceptibility. And in
attempting

attempting to correct or remove stammering, while every attention should be paid to such means as physical and medical science will point out, for the strengthening of the corporeal system, it is of the utmost importance to bring the persons afflicted with it to reason on the subject. Make them analyze and dissect articulations, if the term may be permitted. Let them practise the formation of the component parts of words, (that is, simple vocal sounds and the powers of the consonants,) singly, and in combination, alternately, till a facility, and habit, of subjecting the muscles, concerned in speech, to the WILL, be acquired, or regained. Impress strongly on their understandings, and induce them continually to keep in view, that though we cannot explain *how* mind acts on animal fibre, yet experience proves, that there exists in

our frame, somewhere, a power, which we call WILL, whereby our muscular strength is put in motion, or made quiescent:—that by this power we first learnt to do those things, which repetition has converted into habit; though we are now no longer conscious of an act of the will in performing them, after we have willed to set about them. This may be exemplified by the acts of walking, running, speaking, writing, fingering a musical instrument, &c. and a little consideration will serve to make it understood.

It may be observed, that musical instruments afford an apt illustration of the mechanism of speech. Instrumental music is harmony of sounds produced by forces purely mechanical; and speech is modulation of sounds produced by similar forces; but more perfect, by as much as nature exceeds art.

The

The organs of speech are moved by muscles, which, from the laws of animal œconomy, are the instruments of the will. But the frequent repetition of these motions so links or associates them, that they seem to proceed by sympathy, or habit; and we are conscious of an act of will, only at their commencement. Hence, any thing that suddenly dissevers them, throws the whole into disorder—involuntary or convulsive muscular motions take place—and, instead of the habit of regular and voluntary motions, succeeding each other in a train, if these interruptions are frequent, a habit of hesitation and stammering is introduced. This may account for the origin and progress of the first sort of impediments in speech.

To counteract stammering, as already hinted, we must appeal to the understanding,
and

and endeavour to arouse the WILL into vigorous and vigilant control of the muscles. When a hesitation happens, let a volition or direct act of this power take place: first to cease muscular motion altogether, and then to commence a new series. The greatest deliberation and recollection should be used in ordinary conversation; and the act of speaking, as such, should be constantly present to the mind, till the wrong habit be overcome, and the right so confirmed as to leave no room to apprehend a relapse. The voice should be carefully pitched at that tone which nature, in the individual, points out as easiest to the organs, and most agreeable to the ear; and by no means should a hurried pronunciation, or fictitious voice, be resorted to. It should be studiously remembered, that we are accountable to no one for the innocent and
decorous

decorous exercise of our muscular powers—that over them we ourselves alone ought to have control—that speech, on proper occasions, is not only an innocent and a decorous, but, in the eyes of others, a necessary and an agreeable exercise of our muscles. Why then be thrown into perturbation and confusion, when we are to perform an action, confessedly in our power; and which others have not only no right to prevent, but are desirous that we should perform? If this train of reasoning be fairly entered upon, many other arguments will suggest themselves, and must inevitably produce good.

The following directions, with variations according to circumstances, will be found to be attended with advantage, if duly and perseveringly complied with.

In order to raise a voice; or that material of
which

which speech is formed, let the vowels be practised in a natural key, but with firmness and strength, for ten minutes or a quarter of an hour, at least, every morning. Then let the powers of the consonants be formed, in their order, singly, and variously combined with the vowels.

After a little rest, if imagination supply a subject, by all means let an imaginary conversation take place for twenty minutes, half an hour, or even an hour, in a firm and natural tone of voice, using every effort of fancy, to suppose it directed to persons indiscriminately; that is, sometimes to servants, sometimes to equals in age and rank, and sometimes to elders, or those considered as superior in consequence and rank in society, from whatever cause. But if imagination do not furnish a topic, then let the time be spent in reading, in a tone

as nearly approaching to the ease of familiar conversation as possible, taking care to manage the fancy as above. This will furnish the lesson;—and after an interval of a few hours, the same sort of conversation, or reading, should be repeated, two or three times more in the course of a day. And on mixing with real auditors, every exertion should be made to associate the ideas of their imaginary, with their actual presence.

These directions, it will be perceived, are founded upon the principle of the association of ideas; than which, a more powerful principle, in the formation of human habits, cannot be conceived. It is a trite observation, that “we are the creatures of habit.”—Nothing can be more true: and we become so by the influence of this principle. To overcome a bad habit is, therefore, no easy task;

task; but the first step towards it is to break the chain of associations by which it was brought about, by introducing others of a contrary tendency. What can effect this but a rational system of action, carried on with watchfulness and perseverance?

I think it may be laid down as an incontrovertible position, that persons possessing an ordinary mental capacity, with an adequate share of industry and strength, may *certainly* overcome the habit of STAMMERING, by means such as are here pointed out.

I have never known such a plan fail of success, and I feel no difficulty in saying, that I think it never can fail, with the possession of these requisites.

THE FAULTY OR DEFECTIVE PRONUNCIATION OF SOME OF THE LETTERS, *without stammering*, the other class of impediments, may, in most cases,

cases, be corrected by due attention to the requisite positions of the organs concerned in the formation of articulations, unless where these organs are totally defective, or very imperfectly formed; and even then, much may frequently be done towards removing the defect in pronouncing words, by duly considering, what I beg leave to term, the *mechanism* of speech. For, by attention to this, it will often be found that one part of the machine (by being properly applied) will, in a great measure, supply the defect of another. Suppose, for the sake of example, that a person had lost, or had been born without, the uvula, such a person would turn all the guttural sounds into dental or nasal; that is, where *c*, *k*, *g*, &c. were to be sounded, he would sound *t*, *d*, or *ng*, for want of that stop which the uvula and back part of the palate
form

form in guttural articulations. But teach him to elevate the middle part of the tongue to the roof of the mouth, instead of the tip of it, or the back part of it, and he will thereby be enabled to pronounce guttural articulations nearly as perfectly as if he had had no such defect.

It would carry me far beyond the limits I have prescribed to myself in these hints, to be very minute in directions here; and it is the less necessary, as the formation of the powers of the consonants has already been described. To youth, those who mostly require such directions, it will always be found, that a little *showing* is worth a volume of written instructions. Yet I would recommend to persons having any impediment of this sort, a close attention to what has been pointed out concerning the positions of the organs of speech,

in

in the formation of the powers of the consonants.

Directions concerning the tones and quantity of the sounds represented by the vowels, would belong more properly to a treatise on prosody, than to a section on articulation. Suffice it to say, that in cases where the palate is defective, and these sounds consequently apt to pass through the nose, it will greatly assist in obviating this defect, to keep the mouth more than usually open while the person articulates.

It is always of the utmost importance to a speaker to have a well toned and naturally pitched voice: hence the lungs should have full play—the inspirations and expirations of the breath should be easy and natural; and that degree of muscular action exerted in the vocal organs, which is requisite to give force and consistency to the sounds uttered.

OF WRITING.

THIS is an operation to which deafness offers no impediment, and therefore nothing particular is necessary to be said of the manner of teaching it; though it may be proper to remark, that it cannot be too early taught, as it does, according to the observation made concerning speech, materially assist the memory. And, therefore, the intervals of pronouncing are employed in learning to write the letters and syllables; so that speaking and writing go hand in hand

OF READING.

READING is either the act of pronouncing at sight, or of intelligently tracing with the eye, what is written or printed. Thus, a person may rightly read, that is, accurately pronounce a sentence or a paragraph, who has not the proper ideas affixed to the combination, of words he has uttered. Another person may silently cast his eye over the same sentence or paragraph, and perfectly comprehend the ideas it conveys. Both are said to have read it; though, it is clear, under different acceptations of the word. It is of reading, under the former of these acceptations, that I am now to speak: the other idea of it belongs to another division of this subject.

Our language, from whatever cause, (and

the same may be observed of other modern languages,) abounds in words spelt differently from the manner in which they are pronounced. Both vowels and consonants are sometimes introduced, in the orthography of a word, where the proper sounds of neither are heard in pronunciation:—one vowel is sounded like another; and the same vowel has various sounds peculiar to itself. Hence it should seem, that we have not a sufficient number of written characters, to represent the elementary sounds in our language. The vowel *a*, for instance, may be considered as representing three simple sounds: as, in the words, *hall*, *hat*, *hate*, &c. In the rudiments of articulation, the open sound of this vowel was only attended to; as we advance, however, its other two sounds, as heard in the words *hat* and *hate*, require our notice; and their

use

use is very extensive, though it is often difficult to bring deaf persons to a nice distinction of them. The chief nicety consists in quick and slow, strong and soft, &c.; and in the mouth being more or less open. To represent these various sounds of this letter to the eye, we mark them thus, *á* as in *hall*, *à* as in *hat*, and *ā* as in *hate*.

Hence we have, in a manner, two new vowels, or elementary sounds, noted by distinct marks, which with the others, and the powers of the consonants, already described under the head of ARTICULATION, give us a set of characters, representing, pretty well, all the positions of the organs of speech required in English pronunciation; at least, with as much precision as *deaf* people can well attain. For I speak not here of nicely modulated tones and accents: these depend upon the ear, from

which, unfortunately, *they* can derive no assistance; and, consequently, such inflections of the voice are out of the question.

It is foreign to my present purpose to enquire how far it might be practicable to fix a mode of writing our language, that would do away the difficulty arising from the difference between the spelling and the pronunciation of the words in it. That it would be very desirable must be allowed; but, from the ill-success of all the attempts hitherto made for that purpose, it is certain many impediments are in the way.

The following are examples of the use of the powers of the letters, in accustoming deaf people to pronounce words, where the vowels or consonants do not retain their proper sounds.

(*Spelt*

(*Spelt in his book.*) (*Write on a slate, or any convenient tablet, for his inspection, as pronounced.*)

Ambition	ám be shán
Engagement	àn gāj mǎnt
Information	en for mǎ shan
Book	bwk
Understanding	án dār stàn deng
Usefulness	us fwl nàs

The letters that lose and retain their proper sounds in these examples, are evident from inspection; and so of others. Deaf persons, in general, require this tedious assistance only in the early part of their instruction; for by practice they soon acquire a readiness in catching, from the mouth of their teacher, the formation of words, according to the elementary instructions they have received; and they are almost as quickly set right in their pronunciation, as those who have the use of their ears.

OF COMMUNICATING
A KNOWLEDGE OF LANGUAGE

TO
THE NATURALLY DEAF AND DUMB.

IN order to obtain a correct notion, both of the difficulties and facilities of teaching language to the naturally deaf and dumb, let us, for a moment, consider what language is, and how it is acquired by those who hear.

We may define it, *the expression of thought*; that is, thought rendered cognoscible, by means of impressions on the external organs of sense: or, in other words, it is the medium by which mental operations are transmitted from mind to mind.

We shall the more readily understand this, when we reflect, that all our knowledge consists

sists of, or is built upon, our sensations. It is through the means of organic impressions, that the mind obtains materials for its operations. It is through the power it has of retaining, associating, combining, and arranging those impressions, even when the objects that excited them are removed, that we are enabled to use and comprehend language; which is, in reality, nothing more than certain organic impressions, (objects of the *eye* or *ear*,) either naturally and universally understood, as accompanying certain internal feelings; or such as are agreed upon by common consent, and are rendered significant by means of mental associations. Hence language has, not improperly, been divided into natural and artificial, according as the signs of which it consists are such: that is, signs which we derive neither from imitation nor invention;

as, gesture, &c. and signs which we do derive from these sources; as, words, articulate or written.

Gesture, feature, and modulation of the voice, are the natural signs of internal feelings. These constitute a strong and universal language; but it is that of sentient, rather than of reasoning, beings. Even brutes possess it, in some measure. It expresses passion, and the stronger emotions, more forcibly than can be done by words, (that is, artificial language,) but it possesses not the means of detail.—It portrays the state of our affections; but cannot enumerate or describe the causes that produced them. It is, nevertheless, the foundation upon which the superstructure of what is called artificial language is raised: since it is, perhaps, impossible to conceive, how beings destitute of natural language

language could invent, (if indeed it be of human invention,) or even at first comprehend, artificial language, or the arbitrary signs of ideas, &c. which require common consent. It is clear that this consent could not be obtained, but by a mutual understanding. There must have been a medium of mental intercourse; a sign to propose, on the one hand, and assent, on the other, before currency could be given to words, as the signs of thought, in the ordinary course of human progressions.

Having thus shortly seen what language is, let us, in the next place, endeavour to give a brief sketch of the way in which it is ordinarily learnt by those who *hear*: and thence, by comparison, we may discover in what consists the difficulty of communicating it to the naturally *deaf* and *dumb*, and the means of surmounting this difficulty.

Now,

Now, as soon as children begin to notice, as it is termed; that is, as soon as the impressions of external objects on their organs of sense begin to be retained (that is, remembered) and associated in their minds, they acquire some degree of knowledge of natural language. The smiles and blandishments, or the frowns of the nurse, are early comprehended by them; and, by a necessary consequence, the words that accompany those signs of the countenance, are among the first in the infant's vocabulary, that are distinctly understood. It is thus that children who hear, learn the meaning of words, by the reiteration of articulate sounds becoming gradually associated in their memories, with the impressions received from the objects to which they are applied. Their faculty of imitation is next voluntarily exerted in attempts to produce
those

those sounds; that is, to speak. This effected, in a partial degree, words become intimately united to them, and enlarge the sphere of their conceptions. By using them, at pleasure, they discover that they have not only the ready means of raising images in their own minds, but also in the minds of others. One step of this sort leads to another, and the confidence and exertion of the little learners increase with their success, till they can imitate almost every articulation as soon as they hear it. And the pleasure of imitating articulate sounds is such, from the pleasing associations of its first effects, that it soon gives rise to prattling loquacity, which far outruns the occasions that arise in infant minds for using it. Hence the order of their learning a language is presently inverted: instead of learning new words to express
objects

objects or ideas that had previously engaged their notice, as was the case at first, they find it necessary, now, to occupy much of their attention in discovering what ideas are to be annexed to the words they have acquired. A few disappointments, and a little ridicule, arising from the wrong application of these, afford a salutary discipline, to keep the attention awake, and to sharpen enquiry; which seldom stops till a stock of significant words is obtained, sufficient to answer the common purposes of colloquial intercourse. Thus far, by the help of HEARING, a language is picked up, which is called vernacular, or the mother tongue.

Then commences, in civilized communities, what is more particularly termed learning, or education; namely, the study of letters:—though, perhaps, what had already been going on does not less deserve that distinction.

Here

Here we have words presented to us as objects of the sense of SEEING. The first step in the learner's progress, in becoming acquainted with them, under this new form, is to connect, in his mind, certain sounds with certain visible characters. These characters, in combination, constitute words; the sound of most, and the meaning of many, of which are already known and familiar; (I speak of the native tongue;) so that the learner is embarrassed with little more than remembering the combinations of characters; that is, to *read* and *spell*. We shall see a wide difference in the case of those who have the heavy misfortune to be born deaf, or to lose their hearing in early infancy. Though, happy it is for *them* that artificial language (that is, words considered as the arbitrary signs of the objects of our ideas, or of our ideas themselves) is the object of
the

the sense of SEEING, as well as it is of that of HEARING.

These two senses are distinguished above the other three, by the approximation of their functions to mental, rather than to corporeal perceptions. It is true, that like the senses of feeling, tasting, and smelling, they are acted upon by corporeal, external stimuli; but the former differ from the latter thus remarkably, that we have no direct consciousness of the impressions made upon them, otherwise than by the information which the mind receives. This leads me to remark, that the five external senses, as they are called, naturally arrange themselves into two distinct classes, corresponding, and essential, to the two parts of which we conceive our frame to consist: namely, BODY and SOUL.

The senses, without which the body would
be

be lifeless, are *feeling*, *tasting*, and *smelling*: the two last are, perhaps, only modifications of the first. Without *hearing*, or *seeing*, the mind must remain a blank; and hence the superior importance of each of these two senses to men, as rational beings.

It is not foreign to the present subject, to glance at the *comparative* importance of these two most important avenues to the mind. Were the point to be determined by the value of the direct sensations transmitted to the sensorium, through each of them, merely as direct sensations, there could not be any ground for a moment's hesitation in pronouncing the almost infinite superiority of the *eye* to the *ear*. For, what is the sum of the information we derive from the ear, as direct sensation? It is *sound*. *Sound*, indeed, admits of incalculable variety; but strip it of

the value it derives from arbitrary associations, and it is still but a titillation of the organ of sense, painful or pleasureable, according as it is shrill, soft, rough, discordant, or harmonious, &c. Should one, on the contrary, attempt to set forth the sum of the information we derive from the eye, even as direct sensation, that is, *visible impressions*, it is so immense, that volumes would not contain a full description of it:—so precious, that no words short of those we apply to the mind itself, can adequately express its value. Indeed, all languages bear witness to this, by figuratively adopting visible imagery, to signify the highest operations of intellect. Expunge such imagery from any language, and what will be left!—What, in this case, must become of the most admired productions of human genius! Whence, then, it may be asked,

asked, (as it often has been,) does it arise, that those born blind have such superiority of intelligence, over those born deaf?

Take, it might be said, a boy nine or ten years of age, who has never seen the light, and you will find him conversable, and ready to give long narratives of past occurrences, &c. Place by his side a boy of the same age, who has had the misfortune to be born deaf, and observe the contrast. The latter is insensible to all you say: he smiles, perhaps, and his countenance is brightened by the beams of "holy light*;" he enjoys the face of nature, nay, reads with attention your features; and, by sympathy, reflects your smile or your frown. But he remains mute:

* Milton.

he gives no account of past experience or future hopes.—You attempt to draw something of this sort from him: he tries to understand, and to make himself understood; but he cannot.—He becomes embarrassed—you feel for him, and turn away from a scene so trying, under an impression, that, of these two children of misfortune, the comparison is greatly in favour of the *blind*, who appears, by his language, to enter into all your feelings and conceptions, while the unfortunate *deaf mute* can hardly be regarded as a rational being, yet he possesses all the advantages of visual information, as direct sensation. All this is true.—But the cause of this apparent superiority of intelligence in the blind, is seldom properly understood. It is not that those who are blind possess a greater, or any thing like an equal stock, of materials for
mental

mental operations; that is, sensations, as we have already seen. No, but they possess an invaluable engine for forwarding those operations, however scanty the materials to operate upon—artificial language. Language we have defined to be the expression of thought; so it is, but it is, moreover, when refined and methodized, the medium of thinking. Its value to man is nearly equivalent to that of his reasoning faculties: without it he would hardly be rational.

It is the want of *language*, and not the want of *hearing*, (unless as being the cause of the want of language,) that occasions that deficiency of intelligence, or inextension of the reasoning faculty, so observable in the naturally deaf and dumb. Give them but language, by which they may designate, classify, compare, and consequently remem-

ber, excite, and express their sensations and ideas, then they must surpass the originally and permanently blind, in intellectual perspicuity, and correctness of comprehension, (as far as having actual ideas affixed to words and phrases, is concerned,) by as much as the sense of *seeing* furnishes matter for mental operations, beyond the sense of *hearing*, considered as direct sensation. It is one thing to have a fluency of words, and quite another to have correct notions, or precise ideas, annexed to them.

But though the ear furnishes us only with the sensation of *sound*; and *sound*, merely as such, can stand no comparison with the multiform, delightful, and important information derived from visual impressions;—yet, as sound admits of such astonishing variety, (above all when articulated,) and is associable

at

at pleasure, in the mind, with our other sensations, and with our ideas; it becomes the independent and ready exponent, or nomenclature, of thought: and, in this view, is important indeed. It is on this account, chiefly, that the want of hearing is to be deplored, as a melancholy chasm in the human frame.

A question has been frequently agitated, and very frequently dogmatically decided in the negative, whether speech be natural to man? This is not the place to enter largely into the consideration of it; but I cannot avoid remarking, that, perhaps, much disputation and argument might be spared, by coming to a precise agreement on what is to be understood by the term *natural*. If by speech being *natural* to man, it be meant that he *necessarily* speaks, as he eats, sleeps, &c.

it certainly is not so. Yet I should suppose this to be the meaning annexed to the term, by those who cite the *Dumbness* of persons born deaf, or who lose their hearing in early infancy, in proof of the negative they give to the question, as has been done by a voluminous writer* on the origin and progress of language. Otherwise, how could it be expected that they should speak, that is, produce articulations in imitation of those which were never *heard* by them, nor any other way made perceptible to them.

The words of Horace†, “*mutum et turpe pecus*,” when speaking of the first men, have been quoted as an authority on the same side. But they can hardly be considered as of any

* Lord Monboddo.

† Hor. Sat. Lib. i.

weight in deciding the question. As a poet, he was at liberty to sport his fancy: and, indeed, he seems to have troubled himself no further about the matter, for he presently after tells us, that they found out words, names, &c.

“Donec verba, quibus voces sensusque notarent,
Nominaque invenêre —————.”

If, on the contrary, by speech being *natural* to man, it be only meant, that he is fitted by the constitution of his frame, and intended by his All-wise Creator, to be an animal speaking (*sponte suâ*) voluntarily, I know not how the question can be negatived. Let us consider but for a moment the functions of the ear, and attend to the construction of the organs of speech, so nicely adapted to the production
of

of a variety of sounds, and then say, if we can, that the wisdom which so accurately adjusted means to an end so important, had no end in view.

Understanding the term *natural* in this sense, does not, in my mind, imply any thing like *one* universal articulate language. To suppose this, would be assuming that man is otherwise constituted than we find him. His imitative and inventive faculties were bestowed in vain, if he had nothing to imitate or to invent. It only implies the universality of *some* sort of speech in human society; that is to say, when the powers bestowed upon us by our Creator, are brought into the situations and circumstances where, we may be permitted to conjecture, they were intended to act, and for which they were given, they answer the end he intended. Which, indeed,
is

is saying nothing more than that infinite wisdom could not err.

Speech, by the definition of it, viz. articulate sounds, deriving significance from association, with the impressions received from external objects, or with our ideas, must be indefinitely various, as these are. This variety applies, not only to the words in any one language, but to the number of languages that prevail among mankind; and may satisfy us how any particular language changes with the manners, taste, advancement, or deterioration in science, &c. of a nation, or race of men.

With respect to the origin of language, (*speech*) even if we had not the authority of Moses for considering it as the immediate gift of God to his creature, man, *reason* would, I think, certainly lead us to conclude
that

that it was so. Indeed it must be allowed to be *His* gift, whether we regard it as resulting from the exercise of human faculties, which *He* bestowed, called into action by the occasions for which he framed them; or whether we should conclude, (and surely the conclusion is not less consonant to reason than to Scripture,) that he who formed human machinery with such exquisite wisdom, would give effect to his creation by putting the machine in motion*.

Articulate sounds (by which I always mean

* Though Mr. Horne Tooke says, "*Non dignus vindice nodus*. God having furnished man with senses, and with organs of articulation; as He has also with water, lime and sand; it should seem no more necessary to form the words for man, than to temper the mortar."

Diversions of Purley, Vol. I. p. 36, Note.

words

words or *sounds* produced by the organs of speech) rendered significant by the association of ideas, are of such importance and extensive use, that is no wonder, if, at first view, it should appear to us, that human beings who are incapable of hearing, using, or comprehending them, must be irretrievably lost to social intercourse. Such, indeed, must have been the condition of the naturally *deaf* and *dumb*, if the kindness of Providence had not so ordered it, that the sense of *seeing*, in addition to the many advantages we derive from it, should be susceptible of having some of its impressions, insignificant in themselves, arbitrarily associated in the mind, with other impressions, ideas, &c., in the same manner as articulate sounds are, by which *these*, also, are capable of becoming the signs of thought.

Thus the *eye*, an important organ to us
all,

all, is rendered infinitely so to the DEAF. I cannot resist the opportunity this remark affords me, to express a wish that my experience had enabled me to confirm a remark, as common as it is silly, "that where nature takes away one sense, she supplies the next to it, in importance, in greater perfection." It may be readily allowed that the blind, who are left to depend so much upon the *ear*, and the deaf who depend upon the *eye*, for information, have their attention more immediately rivetted upon the perceptions through these organs; and this may have given rise to the above remark. But so far is it from being true, that the *eye*, as an organ, is stronger, or less liable to disease, in deaf persons than in others, that I believe, at least, an equal number of weak and imperfect sights will be found among a hundred deaf children,

children, as among the same number of those whose hearing is perfect, taken promiscuously from the same classes of society. Indeed, there is too much reason to fear, when deafness is the consequence of any known disease, that the eye often partakes, partially, of the injury.

Whether any instance has ever occurred, of a case so melancholy, as that of one of our species being born deaf and blind, I am unable to say*. I would gladly hope that the case is
of

* Since the above was written, I have read in the obituary of the Gentleman's Magazine for Nov. 1808, page 1041, the following statement: "Hannah Lamb, of Burleigh Street, Strand, aged nine years, born deaf, dumb, and blind. She had been put to bed about nine o'clock at night; and her mother went up to the workshop, to speak to the father, who is an ivory and metal
turner;

of *rare* occurrence—may it ever continue so! For should it unhappily occur, what could be done for the subject of it, but supply corporeal

turner; and on her return she found the child burnt in a dreadful manner, having left the bed to sit by the fire, where, it is supposed, a lighted cinder fell upon her garment, and set it on flames, of which her unhappy situation prevented her alarming any one, and obtaining assistance. After languishing four hours, she expired!!”

I am sorry to have to add another melancholy instance.—Mr. Astley Cooper lately mentioned to me the case of a boy born *deaf* and *blind*, in which he was professionally consulted:—the anxious parent of this little unfortunate had brought him to London, from the northern parts of our island, to seek *chirurgical* aid; but alas! after obtaining the opinions of men at the very summit of the profession, he returned without relief! I requested the particulars, and Mr. Cooper obligingly communicated the following, which will be read with interest.

“ My

poreal sustenance!! I am aware that the Abbé De l'Epée, always ingenious and humane, had offered to undertake the instruction of
such

My Dear Sir,

The boy whom I mentioned to you, as having been born deaf, and blind from congenital cataracts, was brought to my house by Mr. Saunders, oculist. When he was led into my parlour, he put his hands to the wall, and felt around the room until he met with a chair, on which he placed himself. A key was given to him, with which he immediately began to strike his teeth, and from which he seemed to derive great satisfaction. In lieu of the key a piece of wood was put into his hand—he struck his teeth two or three times with it, and threw it from him with a whining noise, and with frequent lateral motion of the body, expressive of uneasiness and disappointment; but upon a key being again presented to him, he beat his teeth with great apparent pleasure, and seemed to wish to continue the gratification for a length of time.

F

I wrote

such children of deprivation, upon the supposition that the *touch* might be employed as a medium

I wrote to Mr. Saunders for *further* particulars, and he gave me the following account:

“The lad’s name is Mitchell, son of the Rev. James Mitchell, of Ardclach, Inverness. His age, I think, about ten years, very strong, and apparently healthy. He was tractable, and his father and friends managed him very easily; for after being gently patted on the head, he would readily submit to their direction and guidance, for the accomplishment of any ordinary purpose.

“As soon as he came into the room, he walked around it and traversed it, feeling every article of furniture. He had the custom of feeling every one, and of running his hands up and down their limbs, as if to judge of their stature. If any thing pleased him, he patted his stomach, as if that organ had, in the course of his existence, given him most pleasure, and he instinctively referred to it for the expression of delight. His principal amusement consisted in hammering his
teeth

medium of *mental* communication and improvement. But, I must acknowledge, I can

teeth with some elastic substance, as a key, and was very angry when checked by the substitution of some other substance incapable of vibration. When I attempted the operation for the cataract, his friends lost their power of managing him; but when liberated from the restraint necessary on that occasion, he was equally tractable as before, and seemed perfectly free from sulkiness. He would not, however, suffer me to approach him afterwards, without great difficulty, possibly distinguishing me by the nose."

I am,

Yours, very truly,

ASTLEY COOPER.

DR. WATSON,

Asylum for the Deaf and Dumb.

This valuable communication but confirms my previously conceived opinion, of the blank state of the *mind*, where both these essential avenues to it, the **EYE** and **EAR**, are closed.

form no notion of the practicability of this, to any extent that might be termed *rational*, without admitting the exploded hypothesis of *innate* ideas. Every friend of humanity will rejoice that, though we are informed the good Abbé made his offer known through the public journals of his time, it does not appear he ever had an opportunity of attempting to reduce his theory to practice.

These considerations ought strongly to influence all who have the management of the deaf and dumb: they decisively prove, how necessary it is to use every human precaution to strengthen and preserve their sight. They prove, also, how imperiously parents who have the misfortune to have a child in this situation, are called upon to procure for it, as early as possible, that education of the ~~eye~~, if I may use the expression, which will
enable

enable it to derive all the advantages that may be obtained through this extensive source of intelligence. LANGUAGE being once acquired, should disease or age impair the sight, mental intercourse might still be kept up with a deaf person, through the sense of feeling, by means of the manual alphabet and other contrivances.

It has occurred to me, that it would be well worth the attention of the *blind* to acquire and retain such an alphabet, in case of any accidental loss of hearing. This hint may, perhaps, meet the eye of some who have an interest in the condition of those who labour under this grievous natural defect; and if it should be the means of averting, even in a single instance, that exclusion from social intercourse, which might otherwise accompany the still more deplorable calamity of a *double*

defect, it will have answered a valuable purpose. But this is rather a digression.

We have seen that, by the help of hearing, a language is readily, and almost imperceptibly acquired, at an early age, (generally about four or five years,) which is sufficient to answer the common purposes of colloquial intercourse. It may be further remarked, as it may have escaped the notice of many, (for we are too apt to think loosely on common occurrences,) that, by the possession of this language, a human being derives a wonderful accession of strength, (that is, influence,) even in this early stage of its existence: the want of it necessarily implies proportionate weakness, or want of influence.

By a few easy movements of the organs of speech, ideas may be excited in the minds of others, that will call forth their most active
and

and effective efforts to gratify the wishes, assist the weakness, or supply the necessities, of the speaker.

We come now to take a nearer view of the condition of a child naturally *deaf*, and consequently *dumb*.

The first five or six months of his existence is not distinguished by any perceptible deficiency: he is not less attentive to the smiles and *visible* caresses of his parent or nurse, than another child would be; but when that period arrives, at which words usually begin to make some impression, and a few responsive syllables, of the most obvious formation, begin to gratify a parent's ear, he remains mute, and insensible to the most moving accents. Still hope finds a thousand excuses; and, though doubts and fears may arise, yet are they reluctantly entertained in the parental breast,

till time has slipt away with a year or two of infancy; and then it is gradually discovered, that when a want is to be made known, or an approval or aversion expressed, it is done by a motion of the hand, head, or countenance. In place of the loquacious and engaging prattle usual at his age, with him there is silence, or only inarticulate sound. At times he is pensive and cheerless, no doubt feeling the disappointments necessarily, frequently, resulting from incapacity to make himself fully understood by those about him, who, possessing a more perfect medium of mental intercourse, are too apt to be inattentive to the signs and gestures of the little MUTE. Discouraged by his frequent fruitless attempts to make himself understood—and to understand—ought we to wonder, if the temper of a deaf and dumb person should be soured,—

if

if he should be rendered little communicative of the few ideas furnished by his own observation, and still less inquisitive about the ideas furnished by the observation of others!— But, here, I must acknowledge my incapacity to do justice to the picture that might be drawn of a thinking being growing up in the bosom of society without a vehicle for his thoughts. However I may lament my want of words to express all I feel on this subject, the reader will have reason to rejoice that his sensibility has been spared. Rather, therefore, than pursue a theme so affecting, let us turn our eyes to a more cheering prospect—THE MEANS OF OBVIATING THE GRIEVOUS CONSEQUENCES OF BEING BORN DEAF.

The great facilitating causes of acquiring vernacular speech by those who hear, are reiteration of the application of articulate sounds

sounds, or words, and voluntary exertion of the imitative faculty.

Want of hearing precludes the former, and by consequence the latter, in the case of the naturally deaf. As far, then, as regards artificial language, they have no facility of acquiring it, in common with those who hear, till we come to that period when what is called *education*, or the study of letters, begins. Then it is, as already observed, that words are presented to us as objects of the EYE: and through that benevolent dispensation of Providence above alluded to, which renders them capable of being so, alone it is, that we are enabled to teach the DEAF to understand and use a language.

We have said that a child who hears, in becoming acquainted with words, as objects of vision, has only to connect certain sounds with a
few

few visible characters; which characters, in combination, constitute words, the sounds of most of which, need but to be heard, to be recognised, together with the signification of many of them. The deaf learner has a much more tedious route to pursue. To him these characters, and the words composed of them, are all equally unknown and unintelligible. Being altogether new to him, as to their use and application, in order to bring him acquainted with them, we must proceed by the most obvious and simple methods, depending upon what has been termed natural language, (gesture, feature, &c. modified and arranged according to the ability and fancy of the learner,) instead of the mother tongue, for a medium of communication.

Having had no other means of making known his wants or inclinations, or of know-
ing

ing the things intended for his information, by others, his attention has naturally been turned to the interpretation of *visible appearances*. The least alteration of the countenance, a slight motion of the hand or head, will be understood by him, if it does but indicate, in a natural manner, approbation, disapprobation, &c. Thus, when any person, thing, or action, is beheld with a bright or smiling countenance, he immediately interprets approval. The reverse, if he discovers the countenance darkened by a frown, while the eyes are directed to any object. Do you require him to approach you—make the sign of the hand drawn towards you:—to go from you—reverse the sign, and he instantly obeys. Do you require him to eat, imperatively, put your hand to your mouth, making the jaws to move as in the act of mastication, keeping

keeping the countenance intense and steady; he will comprehend and obey, or he will refuse by a significant sign. Suppose you wish to put the question, whether he be inclined to eat, you need only make the same signs of the hand and mouth, and instead of the stern steadiness of command on the countenance, let it bear an indication of enquiry.—By the same signs, with an appearance of anxiety and kind concern on the countenance, you may intreat him to eat:—and so on of other things; such as drinking, sleeping, walking, running, &c.—but the signs necessary on such occasions are so obvious, that they need not be particularized.

It is in this simple manner, that two or more deaf and dumb persons are enabled to hold instant converse with each other, though brought together, for the first time, from the
most

most distant parts. Thus far, these signs may be termed *natural*; but the naturally deaf do not always stop here with this language of pantomime. Where they are fortunate enough to meet with an attentive companion, or two, especially where two or more deaf persons happen to be brought up together, it is astonishing what approaches they will make towards the construction of an artificial language. I mean, that by an arbitrary sign, fixed by common consent, or accidentally hit upon, they will designate a person or a thing, and only that person or thing, by that sign; which, from henceforward, is used by them as a proper name. It is remarkable that, although in the first instances of inventing and applying these sign-names, (if I may call them so,) they are generally guided by some prominent, but, perhaps, by no means permanently distinguishing, mark,

such

such as, (in the case of a person,) a particular article of dress being worn, the first time of becoming acquainted—an accidental wound, though it leave no scar—a peculiarity of manner, &c.—yet, after having fixed, they never vary, notwithstanding the distinction that guided their choice, should have long ceased to be observable about the person of the individual to be designated. Nor will they fix upon the same sign for another of their acquaintance, though, at the time of first meeting him, he might have the same mark of distinction about him, which they had used to specify a former person. This fully proves, that they regard the sign, merely, as a proper name; and they receive it as such, from one another, without enquiry as to its origin:—I have very frequent opportunities of observing this.

But

But an example will, perhaps, be requisite, to make it clear, to those unacquainted with the manner of these interesting, but unfortunate fellow-beings.—Suppose a person, the first time he should be particularly taken notice of by one who is deaf and dumb, had accidentally cut his face, and wore a patch: it is a hundred to one, that that would, from henceforward, be his distinguishing mark, unless some one else of the deaf person's acquaintance had already been so distinguished. —The wound might be cured, and the patch removed; but the deaf person would uniformly put the end of his finger to the part of the person's face where the patch had been worn, when he wanted to point him out. And, lest those to whom he might be desirous of afterwards communicating something concerning this person, should not comprehend him, he
will

will not fail to introduce him to them, by repeatedly pointing to him, and then to the mark by which he means to describe him, till he thinks he has sufficiently engaged their attention. By similar contrivances, places and things, as well as persons, nay, even qualities and circumstances, are distinguished by the *deaf*, in an astonishing manner. To attempt a description of those signs, in words, would be endless, because they are various, as the circumstances and fancies of their inventors.

Yet, being grafted on the parent stock of natural and universal signs, they may, in some measure, be regarded as different dialects of the same language. Hence every one, who would undertake the arduous task of successfully teaching the deaf and dumb, should closely turn his attention to the study of that language termed *natural*, where it consists

of gesture and feature, in order to enable him to comprehend, as far as possible, the signs of his scholars: which, at first, each, more or less, differ from one another, as they more or less resemble those signs universally to be understood.

Of how much importance it is to a teacher of the deaf and dumb to understand their signs, will readily be apprehended, if any one will attempt, either to teach or to learn a language, without having another, common to master and scholar. As if, for instance, an Englishman, understanding no language but his own, should attempt to teach it to a German, or *vice versâ*. But, never let any thing so chimerical be thought of as an attempt to turn master to the deaf and dumb, in the art of signing. Whatever others may say, I own, I have always found it best to become,

come, in some measure, a learner, instead of teacher, of this mode of expression.

What should we expect from an European who should undertake to teach his own regular, copious, and polished language, to a South-Sea Islander, who was henceforward to live among Europeans, and whose scanty vocabulary extended only to a very few words, barely sufficient to enable him to express, in a rude manner, what was required by the uniformity of his condition, and his paucity of thoughts? Should we suspect that the teacher would set about new modelling, methodizing, and enlarging this rude and imperfect language, as the readiest method to make the islander acquainted with the European tongue; especially, though this new-modelled language, were the thing practicable, which I apprehend few will contend for, could be of use but to

these two persons? Does this supposition appear ridiculous; how much more fanciful, and useless, is an attempt to methodize signs, for the instruction of the Deaf and Dumb! Would it not be a more natural and rational mode of procedure, for the teacher to begin by watching the objects and occasions to which his scholar applied the words of his barbarous speech; that, by knowing *these*, he might gradually substitute the words of the language to be taught; using the *former*, only as an introduction to the *latter*?

This is the sort of use I make of signs, their rude language, in teaching the deaf: for it should never be lost sight of, that deaf people are not educated to live always among persons in their own unfortunate situation. Were this the case, indeed, an artificial language of methodized signs, (gestures, motions, &c. of
the

the body or limbs,) might be of important use. But, as they are intended to mix with their fellow beings, in social habits and necessary avocations, we have to open a channel to this intercourse. And it cannot be done, so effectually by any other means, as by teaching them the language of the country where they reside. Our first step, in accomplishing this, is teaching articulation, in the manner already described. I have, under that head, insisted on the importance of this step, towards the acquisition of language. I must here further remark, that in learning the letters, as there pointed out, a very important operation is going on in the mind of a deaf person: I mean the association, in the memory and understanding, of the figures of written or printed characters, with certain movements or actions of the organs of speech. The very

habit of regarding the one as the representative of the other, paves the way for considering combinations of those actions, or characters, as the signs of things, or of ideas; that is, significant *words*, written or articulate. We, who hear, consider words chiefly as *sounds*; the deaf, who have learnt to speak, consider them rather as actions proceeding from themselves. And this gives language, to them, a sort of *tangible* property, which is of vast importance, both as respects its retention in the memory, and as respects one of its important uses—the excitation of ideas in their own minds. On this account the time, the labour, and attention, necessary to acquire articulate speech, by those who are dumb, through want of hearing, would be well bestowed, even if their speech were not intelligible to others.

But

But this is not the case; and, therefore, we have an additional motive for its cultivation.

I could mention many facts illustrative of these observations; but, as I rather wish, that the incredulous should be convinced, by their own experience, where it can be easily attained, than by my reasoning, or by facts of my adducing, their candid examination of persons who have been taught is, therefore, invited. One fact, however, I may be excused for mentioning; more especially, as it cannot be discovered but by those who have lengthened opportunities of observation. It is this: deaf persons, having learnt to speak, are frequently overheard, speaking softly to themselves; that is, rehearsing words, or sentences, either for the purpose of better remembering them, or of framing such expressions as they think will best convey their ideas.

The power of pronouncing syllables being acquired, we proceed to words; of which, of course, we chuse the easiest to be understood: for, as it is not solely, nor even principally, want of knowing how to read these, that forms an obstruction to our progress, we are less solicitous about the number of syllables they contain, than about their meaning being obvious. Of all the words of a language, the *names* of the objects that surround us admit of the most direct application, and they most naturally present themselves to begin with. To give names was the first exercise of human speech: “*And out of the ground the Lord God formed every beast of the field, and fowl of the air, and brought them unto Adam, to see what he would call them. And Adam GAVE NAMES to all cattle, and to the fowl of the air, and to every beast of the field.*”

We

We therefore show a word, by which some familiar object is *called*: as, *body, head, face, &c.* and the scholar is made to copy it, on his slate, and is taught to pronounce it; he is then shown the object named, and made to point to it, while he pronounces the name, till he remembers the connexion between the *name* and the *thing*, sufficiently to point out the object when shown the *name*; or to pronounce and write the name, when shown the *object*. From the parts of the body, we proceed to the covering of it, and learn the names of the articles of dress, in the same manner. We then learn the names of the next most familiar objects; such as articles of furniture, *chair, table, &c.* (*See the Vocabulary,*) always taking care to make perfect as we go on, and frequently going over all we have learnt, till every word becomes familiar in its articulation, orthography, and meaning.

Repetition

Repetition is the grand means of impressing the memory; and is the more necessary in the lessons of the deaf and dumb; as the principal barrier to the acquisition of language, by them, consists in their having few means of reviewing words and phrases, but by direct instruction, or set study.

Hitherto all is very easy: the objects, of which we have been learning the names, are within our reach, and about us in our apartment. Yet the advancement we have made is not to be regarded as of small consequence; though it be only to name such objects as have been mentioned. We have learnt the important lesson, that words mean something. A considerable point is gained, when the learner has acquired a habit (limited as it may be) of associating the *sign*, in his memory, with the thing signified.

But

But we are not always confined to our apartment, and, we can hardly take a step beyond its threshold, till we meet with something that we know very well by sight, but cannot name. We cannot remove it to our apartment, to learn its name there; nor can we very conveniently carry our writing tablets with us, on all occasions.

Here another art, that speaks to the *eye*, comes to our aid; and the tool of the engraver, by furnishing us, in small compass, with the lines that bound the visual appearances of objects, in perspective order, enables us to keep their resemblances at hand. Our fancy can supply the properties that manifest themselves to our other senses; or rather, we are enabled to read picture-language by that wonderful mechanism of our frame, by which our sensations become so blended and linked together,

together, in the seat of thought, that, no sooner does one sense give notice of the presence of an object, than all that we knew of it, through the other senses, is present in our ideas: hence, well-executed pictures are mistaken for the things they represent, till brought to the test by the actual application of the organ of touch:—hence, in truth, the practicability of artificial language.

To have correct ideas affixed to words, is of importance to all; it is peculiarly so to the deaf and dumb. And therefore, it greatly facilitates our progress to have, at hand, engraved representations of the *things* of which we are learning the *names*. Indeed, in my progress of teaching, it early struck me, that a vocabulary, upon the plan recommended by Mr. Locke, would be of great utility, and shorten the labour, both of teacher and learner; that

is,

is, a vocabulary of *those words, standing for things which are known and distinguished by their outward shapes, accompanied by draughts and prints**.

Nothing, however, of this sort, being extant, at all calculated for the deaf and dumb, I endeavoured, for some years, to supply the place of it, by making collections of as many cheap prints and cuts of the objects most required to be named by them, as could be met with in the shops in London. But these ill answered the purpose. Want of arrangement, repetition, and consequent confusion, and inconvenient bulk, rendered them unfit for general reference, especially to children.

At length, therefore, I resolved to have a

* *Essay concerning Human Understanding*, Book iii.
Chap. xi. Sect 25.

set of plates engraved, representing the objects, as far as could easily be done, named in the annexed list of substantives, which I have long used as part of a sort of classed vocabulary; designedly embracing only the names of objects most generally met with, and commonly known; leaving it to the attention and curiosity of the learner to augment the list, under the respective heads, according as his opportunities enable him. It is sufficiently copious to answer the purpose intended by it,—to give a habit of *naming*, and to enable the young scholar to express the objects which are the subjects of his desire, aversion, necessity, &c. The first time of going through it, we disregard the *heads* or generic names: but the next time we take particular care to attend to *these*, and their relations to individual or specific names.

To

To attain a habit of NAMING, is a most important step in the progress of learning a language by the *Deaf*. Grammarians will excuse me, if I consider all the parts of speech as *names*. When we call a thing or being by a name, (as *mountain, man, &c.*) the word we employ, is by Grammarians called a *noun* (*ἰσμενα, nomen, nom*) or *substantive*; but we have many other perceptions concerning it, which we must designate by words, that is, we must name them: *is, stands, walks, high, low, large, tall, well, ill, far, near, from, to, slowly, quickly, &c.* are no less names of perceptions, than *tree, animal, &c.*

The mother tongue is no where learnt with any reference to grammatical divisions and arrangements. Perceptions are named as they arise, and the names applied to them are (as we have seen) gradually retained and understood

stood by the infant learner. A more refined and metaphysical mode of procedure might, perhaps, be thought to shorten the labour, where the work is taken in hand as a science.

But we can seldom advantageously deviate from the path of nature. Nevertheless, where she has placed a barrier in the way of the improvement and moral advancement of any of her children, we may fairly use all the means she has put into our hands, for its removal: the final cause of such impediments being, we may suppose, the exertion of those means. Human ingenuity, and human benevolence, are enlarged by exertion; and such is their nature, that the agent is sure to be benefited equally with, if not in a superior degree, to the recipient. We may, therefore, be permitted to employ such management and previous arrangement as will bring
our

our learners into such situations and circumstances as will best enable them to receive the assistance we can afford them. With this proviso, I have no hesitation in saying, that naming perceptions, as they arise, without regard to metaphysical or grammatical distinctions, is the only sure and direct road to the acquisition of a language, by those who have only the natural language of gesture and feature to assist them in acquiring it. For, let it be strictly borne in mind, that the analogy between the naturally DEAF, and those who hear, learning a language, holds only with respect to the first language, or mother tongue. There can be very little in common to them, in the learning of a foreign or dead language, by the latter: for in this case, the mother tongue always serves to explain the terms of the language to be acquired; an
H advantage

advantage of which the deaf and dumb are totally deprived. And yet, if we compare the progress they make, with that generally made by young scholars, in what are termed the learned languages, in the same length of time, we shall, for the most part, I think, have reason to draw a conclusion in favour of the mode of following nature in teaching a language. It should not, however, be forgotten, that, fairly to estimate the attainments of a *deaf* scholar, he should rather be compared (though under very disadvantageous circumstances) to a child of an age equal to the length of time *he* has been under tuition, than to a youth, having all his faculties, who has been as long at school.

While proceeding through the vocabulary of substantives, in order to give variety to the lessons, we learn the pronouns, personal and demonstrative,

demonstrative, &c. at suitable intervals; always attending to the pronunciation, and making the learner write the words with his own hand. Then the verbs, to *be*, to *have*, and the other auxiliaries, are learnt to be varied according to their persons, joined to nominatives: as, *I am*, *he has*, &c. The meaning of all these is learnt by application in examples. When he says *I*, he points to himself; when he says *you*, he points to the person teaching him; *he*, to a third person, &c. Nothing is more obvious to the eye than number, as a property of things; we therefore early learn to count, *one*, *two*, *three*, &c.

These preliminaries settled, we proceed to the construction of short sentences, without learning the rules of syntax! Thus, for instance, we may say: *this is my pen*; *that is your pen*; *that is his pen*; *these are our pens*, &c. “I have

one body." "I have *two* hands," &c. showing the meaning, by pointing out the objects and their relations already perceived by, and familiar to, the learner, though he could not express them. For practice, he is taught to change the substantive, till he can himself give examples, and rightly apply all the words in such sentences; which, in general, he is not a little proud to do. When the pen writes well, *my, your, &c. pen is good.* When it does *not* write well—*my pen is bad.*

It will readily occur to the reader how to exemplify "to write *well,*" *quickly, slowly, &c.* and to vary the verb, accompanied by the adverbs, with different nominative cases: as, *I, you, he, they; Thomas, John, &c. &c.* By such sentences as the following, we can show the meaning of the words called prepositions: "I write *with* a pen." "I hold my pen *in* my

my hand." "I lay the pen *on* the table."
 "I put the pen *into* the inkstand, *to* take ink."
 "My book is *before* me." "I sit *at* the table."
 "John sits *next to* me." "The door is *behind*
 me." Just in a similar way, by example and
 application, we can show the meaning of the
 conjunctions, copulative or disjunctive, as
 grammarians call them. Thus: "John *and*
 Thomas," is *John* joined with *Thomas*, in an
 action or series: "John and Thomas *write*."—
 "John *or* Thomas," is, John, *not* Thomas:
 Thomas, *not* John: "John *or* Thomas *writes*:
 I do not know which of them."

I might multiply examples indefinitely in
 the application of each of the parts of speech;
 but though I might thus fill many pages, I
 must still leave out many thousands of ex-
 amples, equally illustrative as those I insert.
 The principle being understood, the applica-

tion' is easy. I am not here writing lessons for the deaf and dumb; but endeavouring to give an idea of the process of teaching them. In all cases, examples should be furnished to the learner, till the effect intended be produced; that is, till it appears, by examples given by himself, that he rightly applies the word intended to be illustrated.

I wish it to be understood, that these exercises are introduced as reliefs to the less amusing, but, in the first instance, more important, business of learning the vocabulary.

In addition to the list of substantives above referred to, we have a selection* of *verbs* and

* The principle that guided in forming this selection, was the words that compose it being capable of having their meaning shown by an obvious sign; that is, motion

and *adjectives*, which are learnt and committed to memory along with it.

The first year of a learner's time at school, is necessarily taken up in becoming acquainted with the pronunciation, orthography, and meaning, of this vocabulary; and with such occasional exercises as will most obviously exemplify the application and meaning of

motion or gesture, &c. Should it appear to me, that the public are benefited by the publication of the substantives accompanied with plates, and that they could be further benefited by the publication of this selection of adjectives and verbs, they will all be printed together on some future occasion. But, though I speak of publishing a selection of words that admit of explanation by signs, it will not be expected, I trust, by any one who has read what I have said on that subject, that I should accompany this selection with a description of those signs.

the connecting parts of speech. And where the capacity is good, great progress is usually made in these particulars, during this period. He is then prepared for longer exercises, and for the application of the words he has learnt, in the construction of longer sentences; to which he, of course, requires to be led on by easy and familiar examples. A sort of colloquy, or dialogue, must be entered into with him. The questions, at first, must be all on the teacher's part, and the answers must be formed for the learner, in the most obvious words and phrases that will convey his ideas, in strict conformity to which, they must constantly be framed. How his ideas may be comprehended by his teacher, will require no explanation here, if what has been said above, respecting the natural language of the deaf and dumb, be recollected. Due attention
being

being paid by learner and teacher, the good effects of this method will presently appear. The latter will soon be agreeably surprised, by his scholar changing parts with him, and becoming, in his turn, the interrogator; and that too, in a way that will show he practically understands analogy.

Certain stated periods (as once or twice in a week) must be set apart for the repetition of words already learnt, taking care to see minutely, that correct ideas be annexed to each. When the whole of the words in the selection (substantives, verbs, and adjectives) have been gone through several times, and the learner can correctly spell, speak, and point them out, (if the names of things engraved,) or show their signification by his signs, (if the names of actions or qualities, &c.)
then

then he is to enter upon a work altogether new, to him, as yet. He is to go over his vocabulary again, and to learn a short definition of each word; that is, to tell the meaning of *words* by *words*. I give him this employment, not because I think he will better understand the words in his vocabulary, by being taught to define them; but because it affords an opportunity of enlarging it, by the introduction of synonymous words, and words that are derived in some way from those we are defining. And these new words enable us to explain others. So that, by this means, and by our colloquial exercises, our vocabulary is daily and almost imperceptibly enlarging. This is strictly analagous to the manner of acquiring a first language by those who hear.

The conjugation of verbs is to be carefully
attended

attended to; and one example, at least, through all the modes, tenses, and persons, should, now, be performed every morning, till the pupil can write any person, of any mode or tense required. This is of great use, by habituating him to the inflections of these words, and their agreement with nominative cases. It may be asked, how we are to make him understand the meaning of mode and tense? Were we obliged to do this by metaphysical definitions, such as grammarians have furnished us with, we should find it a hard task. The simple method of induction, or learning by example, relieves us from this difficulty.

“Mode, or Mood,” say grammarians, “is the manner of using the verb.” Some reckon more, and some fewer; and they denominate them variously. I need not stop to enquire
which

which is the most philosophical and just enumeration. Whether they should be called infinitive, indicative, imperative, and potential, after our common Latin and English grammars; or, whether they should be called declarative, interrogative, precative, &c. It is sufficient that we *do* use the verb under every mode that others use it; and we understand what we do, perfectly. For, showing the action of walking, running, eating, &c. &c. we say, what is that to do? The answer is, that is *to walk*, &c. without considering *who* walks, or *when* the walking is performed. We follow our common grammars, and call this the infinitive mood. We say, *I walk*, *I do walk*, *I am walking*, &c. (pointing each to himself, we do so;) *you walk*, &c. (pointing each to the other while we walk,) &c. through all the persons: this we call the
indicative

indicative mood *affirmatively*. We ask the question, in the manner already described, (*page 77.*) “Walk I? Do I walk? Am I walking?” &c. of the other persons; this we call the indicative mood *interrogatively*. With a negative we deny the act: “*I walk not*, (showing rest in a place,) *I do not walk*,” &c. this we call the indicative mood *negatively*. “*Walk*, or, *walk not*,” with the action, and an intensity of countenance, commands or forbids: with a variation in the countenance, as above observed, it also entreats: this we call the imperative mood, or way of using the verb. The auxiliary verbs, *may*, *can*, *would*, *could*, *should*, &c. by which, what is called the potential mood, in English, is formed, being each significant words, must be explained by examples. “*I may walk*,” (if I please,) no person or thing preventing: I am
not

not held, &c. (show, by signs.) “*I can walk:*” I have legs and feet and am not lame, (show, by signs:)—and thus of the others. I hope this may suffice, concerning moods: we must now say something of tenses.

The stated revolutions of the “great orb of day,” which have served mankind, in all ages, to measure and mark duration, have not been unobserved by the deaf and dumb. They have been accustomed to make the sign of sleeping, one, two, or more, nights; or, of enduring one, two, or more, cold or hot seasons, (that is, summers or winters,) and pointing forward to mark futurity: (meaning, one day, two days, one year, two years, &c. to come.)—The same sign, pointing behind, has served them to mark time past: the present, they have distinguished by pointing
directly

directly upwards, and describing the light or darkness that surrounds them. We have, therefore, only to teach them the names of the visible appearances which they have already observed: *day*, when it is light; *night*, when it is dark; Sunday, when we go to church; (to signify this, a deaf person will put himself in a devotional attitude;) Monday, one day more than Sunday; Tuesday, two days more, &c. In short, we teach them the names of the days of the week, and other divisions of time, downwards to seconds, and upwards to centuries. It is almost needless to say, that they must be daily exercised in these things, for some considerable time. *This is Sunday, yesterday was Saturday, to-morrow will be Monday; I am well to-day, I was ill yesterday, I hope I shall be well to-morrow:* and such like sentences, introducing the adverbs, *now, lately,*

lately, before, since, after, &c. must form frequent exercises. Always taking care to seize upon occurrences that have most particularly attracted the notice of the learner. Examples to be understood by him, in this stage of his progress, must not be hypothetical, but according to the truth of things, that come under his notice.

Having acquired the notion of time, and learnt the names of its divisions, our scholar cannot be at a loss to understand the *present*, the *past*, and the *future* tenses of a verb. And this is all the distinction we impose upon his memory, for the present. If his capacity is good, (which we all along suppose,) he has felt the imperfection of his signs to convey his ideas, in respect to the time of the performance of an action, or happening of an event, &c. more than, perhaps,

in

in any other respect whatever. How glad would he often have been, to have been able to explain to those about him, what one of his age, having a knowledge of language, would have expressed readily, in sentences like these: "*I felt* pain (some time past) from confinement;" &c. "*I feel* happy (now) *to be* released: *I will* not offend again (in time to come) that *I may* not *be confined*." "*I did* not *know* the danger of eating that fruit, (or) *I would* not *have eaten* it, (but,) *I will* remember it (and) *will* avoid it. These are short sentences; but they convey details which the rude signs of an uninstructed deaf and dumb person could not convey, with precision, to any one, much less to those, who, having had no occasion to use this imperfect mode of expression, had made it no study. He, therefore, embraces, with avidity, helps to the un-

folding of thought; which are no sooner presented, in an intelligible point of view, than felt to be suited to his necessity—Such are the inflections, and (in our language) the words that mark the tenses of verbs.

We have said that, with a certain proviso, our mode of communicating language, to the deaf and dumb, is by teaching them to name perceptions as they arise. The sensible properties of objects, of course, had early a share of our attention: a *white* lily, a *red* rose, a *green* field, a *tall* tree, &c. could not be long unobserved nor unexpressed. These properties (qualities or adjectives) vary in degree: one rose, &c. is simply *white*, another *whiter*, a third is the *whitest* of the three. In order to make the comparison of adjectives familiar, we have only to bring together the objects in which the qualities exist, and to name our perceptions.

perceptions. There are internal perceptions, as well as external, if I may be allowed the distinction, of qualities, that also require to be named and compared: "the boy who labours to improve himself, and acquires much knowledge, (many, and long lessons,) is *wise*. He who is idle and playful, and fails to acquire knowledge, is *foolish*, is *ignorant*," &c. "The pen that writes well is *good*: the boy that obeys his master, and learns his lessons, is *good*." "The pen that does not write well, is *bad*: the boy that disobeys his master, and neglects to learn his task, is *bad*." Here it is obvious, that *wise*, *foolish*, *good*, *bad*, are names of internal or mental perceptions, and admit of degrees of comparison just as readily as *white*, *tall*, &c. which are names of sensible qualities.

Having applied the term *white* to a lily, to

paper, to linen, to a horse, &c. we must be prepared to understand the word, *whiteness*; and in the same manner we are enabled to annex just ideas to *wisdom, folly, prudence, justice, goodness, truth, &c.*

Should any one question whether the naturally deaf and dumb can be brought to affix the proper ideas to these terms, let him examine how he himself became possessed of the ideas, he affixes to them. And if he finds that he acquired them in any other way than by observing what is *true, good, just, prudent, foolish, wise, &c.* I will allow him to doubt whether the deaf and dumb can acquire them.

By this time, probably about the third year of the learner's progress, supposing in him the requisite attention and capacity, it will be proper and necessary to begin the reading of
printed

printed books, for the sake of profiting by the information they contain. As far as the mere act of reading is concerned, we have no new difficulty to surmount, for, all our exercises and lessons have, in fact, been read as well as written by the learner.. The difference between printed characters, and those used in writing, has, of course, not been unobserved. What constitutes the chief impediment to making sense of what is met with in books, is the promiscuous use of words, without regard to our selections. What is to be done when we meet with a word which we have never seen before?—Precisely that which is done with all children, under similar circumstances; explain it, by the substitution of a word of which the meaning is known, if it can be done; if not, pass it over till a favourable opportunity shall occur to show its
I 3 meaning,

meaning, by an example. If no such opportunity ever occur, then can the meaning of that word be of no great moment to the learner.

To discover the progress he has made, and is daily making, and to assist him in the composition of sentences, (the expression of his thoughts in writing,) he is now required, every day, to furnish a certain number of lines, according to his capacity, from his own ideas. He is at liberty to chuse his subject: he may relate what he has seen in his walk, in his play-ground, or, he may unfold the stores of his memory, relative to more distant places and periods. He may ask questions, &c. His rude essays at expression are often curious, and require some skill in the language of pantomime to discover their meaning, by his own explanations. This attained; it is put
into

into correct, but easy language: he commits it to his memory, thus corrected: and goes to work again, at his leisure hour, in the evening, for next day, generally profiting considerably by the alterations it was necessary to make in his preceding essay.

We have now a channel of communication opened: and the knowledge of the meaning of words, and their use in the construction of sentences, which we have already acquired, may be carried to almost any given degree of perfection and extension. I most earnestly wish to impress this observation on the minds of all who are in any way connected with the deaf and dumb. Could the relatives and attendants of the *rich*, and the masters and companions of the *poor*, be sufficiently persuaded of the truth of it, they would find all the additional trouble they might occasion-

ally have, in conversing with these most interesting fellow beings, amply repaid, by their increased intelligence, and usefulness in society. I say, the *trouble* they might occasionally have; for, to hold conversation with even the most intelligent deaf person, must require more pains than to converse with one who can hear articulations. A deaf person must have our conversation made perceptible to his *eye*, or obvious to his *touch*, before he can comprehend it.

It is truly astonishing, and would hardly be credited by any one who had not seen it, how readily deaf persons, who have themselves been taught to speak, catch words, and even long sentences, from the mouths of those who address them. Yet, in this sort of conversation, it is indispensable that the speech should be immediately directed to the *spectator*,

tator, (we must not call him *auditor*,) who must have an opportunity of observing every motion of the muscles, (as far as these can be seen externally,) and countenance, in order to make out the discourse. On this account, it is impossible for a deaf person to understand the conversation of a mixed company, a discourse from the pulpit, or harangue to an assembly, where the speaker does not immediately address him.

The manual alphabet is another help to a ready communication with deaf persons, who have been taught the use of language: it has the advantage of being intelligible to the *touch* as well as to the *sight*, and, consequently, may be used in the dark. I give no description of it here, because it may be variously formed, according to agreement between the parties using it. But I subjoin a plate representing

presenting that which we use. Any intelligent person may learn it in ten or fifteen minutes: and educated deaf people soon teach it to those they have occasion to converse with.

Writing, though a more tedious mode of discoursing, than either of the preceding, is yet frequently necessary. It is the least liable to be misapprehended, and should, therefore, always be resorted to, where great precision and accuracy are required, in communications made to the *deaf*.

Frequent conversation and intercourse, by the words of the language he has learnt, is of the very utmost importance to a deaf person, (especially if he should happen to have little leisure or inclination for reading,) as the means of extending his knowledge of language, and of enlarging his conception of things;

things; and as the means of retaining what he has acquired. Every one will readily perceive this, who considers how easily a foreign, or dead, language is lost, for want of reading, writing, or speaking, in it.

I think it unnecessary particularly to enlarge upon what branches of useful knowledge the deaf may acquire, besides language, or upon the method of instructing them in these. We have called language, the medium through which mental operations are transmitted from mind to mind. Science consists of mental operations; hence, by enabling the naturally deaf and dumb to comprehend a language, we open a passage through which science can as readily be introduced into their minds, (as far as language is understood,) as into the minds of others: and it will thrive and flourish there, in proportion to the aptitude

tude it meets with for its reception, as in the rest of mankind. Were I to enumerate all they *can* learn, I must run over almost the whole circle of the arts and sciences; I will, therefore, content myself with stating what they positively *cannot* learn—MUSIC and ORATORY.

In the manner we proceed in teaching a language to them, we pay all possible attention, with it, to give them a knowledge of things. The occasions that present themselves to us, for the exemplification of the use of *words*, which we are constantly on the watch to seize, do, often, at the same time, present us with opportunities for conveying to their minds the leading principles of those sciences most interesting to mankind. The natural properties of bodies, on our earth, animate and inanimate, their kinds, habits, &c.

—the

—the use of numbers—the situations and distances of places—the motions and known uses of the heavenly bodies—the notation of time—the nature of *right* and *wrong*, applied to human actions, affections, and passions; their merit, demerit; and the reasonableness of reward, or punishment, as a necessary consequence—the superintendence of an Intelligence, whose wisdom, power, goodness, and greatness exceed all comparison, and comprehension; *His* love of right, *His* abhorrence of wrong; our accountableness to *Him*; our too frequent ingratitude and offences, notwithstanding our obligations—and finally, the means of our reconciliation, and the hope thereby afforded us of endless and exalted felicity. These, I say, as occasions arose, have all, in their turns, been subjects of exemplification, in the progress of teaching a language

to

to the deaf. When they are able to read, and derive *information* from books, (with the assistance of a master,) it follows, that *these* should be used as aids to the attainment of that information which is most important; beginning, of course, with elementary treatises, and extending their attention to others, as circumstances admit. Our scholars arrived at this point, we may consider them as taking rank with the rest of their species, in social life; and the difference of the degrees of knowledge they acquire, from henceforward, may in a great measure, be imputed to causes similar to those that operate upon, and extend or limit, the attainments of mankind at large. These are, natural mental capacity, inclination, leisure, opportunities, and helps, to study.

Two questions very naturally present themselves

selves here: What is the most proper age to begin the education of a deaf and dumb child? And, what length of time will it require to complete that education? Neither of these questions, admits of an absolute and direct answer; I mean, that no precise period of time can be fixed for either the commencement or duration of such education, independently of those circumstances that necessarily vary, in different individuals. This is true, applied, to children in general, as well as, to the deaf and dumb. The following observations may enable us to judge of the proper answer to the first question, in any particular case.

EDUCATION, from the etymology of the word, signifies the fostering, feeding, or rearing, of the mental faculties. Every one knows, that food administered, without some degree
of

appetite, or necessity felt for it, in the person who receives it; creates rather noxious crudities, than salutary and invigorating nourishment. In strict analogy to this, we find that education is thrown away, to say the least of it, upon an individual, till there is some degree of aptitude, or capacity, in the mind to receive it. What this capacity or aptitude consists in, and how it shows itself in children, whether they be deaf or not, we shall endeavour to point out.

From the moment that a child is born into our world, commence his sensations of the impressions of external objects, which are to form the ground-work of that wonderful fabric, a human mind. These, by degrees, become objects of thought; they may then be termed perceptions. The traces and images of these being retained in the
memory,

memory, associated and combined there, constitute ideas. This process goes on, for a while, something analagous to the growth and expansion of the corporeal frame, without any perceptible act of the will in the control of it. It is not till nature has matured her work, to a certain degree, that she permits us to interfere with effect in assisting her to carry it on. When this period arrives, the child is observed to have, and occasionally to exercise, a power of directing his attention to the consideration of one object or subject, in preference to another. In doing this, he will meet difficulties which will produce calls for assistance. The inquisitive curiousness of children is the natural indication of these difficulties; and, in proportion as their attention is fixed by the answers or solutions we offer to them, so may

we fairly consider them fit subjects of education. Hence, some children are better subjects of education at four years of age, than others are at seven; some better at seven, than others are at nine, &c. It may be said, that children who can hear and speak, may thus indicate their aptitude to receive instruction; but how can a parent distinguish these indications in a child that is deaf? This question is more likely to proceed from those who have had no opportunity of observing the manner of those, more than commonly interesting little unfortunates, than from those who have.

It will be found, agreeably to the account we have attempted to give of the comparative importance of the senses of *seeing* and *hearing*, as furnishing matter for mental operations, that the process we have been describing has been but little retarded by deafness. Nay, I
will

will venture to affirm that in many cases, which have fallen under my own observation, it appears rather to have been forwarded by it. I have seen more settled attention to the appearances of things, and more apparent satisfaction at every endeavour of those about them, to gratify curiosity, in children who were deaf, at an early age, than ever I saw in children who could hear and speak. It is not till a considerable length of experience has convinced him of the imperfection of the vehicle he possesses for the communication of his thoughts, that a deaf and dumb child begins to mistrust it, and ceases gradually to weary himself with enquiries that produce nothing but disappointment. Let the parents, therefore, of such children, sedulously watch the indications they give of a capacity to

learn: and from considerations already stated*, they will, I am persuaded, see it to be their duty, if the means are in their power, to improve the opportunity that is in their hands. It is true, that though a deaf child may give proofs of its capacity to be instructed, as early as three or four years of age, it is, nevertheless, too young to be placed at school. I flatter myself, that those tender and intelligent mothers, who may honour what I now lay before the public with an attentive perusal, will find it an easier matter than they imagined, to give a sort of preparatory education to such children of misfortune. Among the various objects that are noticed with delight, by deaf children,

* Page 68.

none, perhaps, are more so than pictures. The plates of our vocabulary, therefore, present a field sufficiently amusing and instructive for the employment of such young learners, under maternal guidance, even if they did nothing more than learn to distinguish the objects they represent, by pointing them out. But I recommend the earliest possible use of the pen, or rather, slate and pencil, by which, and by the manual alphabet, the names of these objects may be learnt to be correctly spelt. Thus, instead of all the notice and attention which children in this affecting situation are inclined to exert, from three or four, to six or seven, years of age, when they may advantageously be placed at school, being thrown away, they may be most pleasantly and profitably exercised.

This remark, of course, applies to mothers
whose

whose education gives them the ability, and whose station in life affords them leisure, to take such pains with an unfortunate child.

I am not without hopes, however, that the indigent deaf and dumb will be profited by the hint, although not through the medium of parental care.

I am encouraged to entertain this expectation, from knowing some amiable instances of benevolent attention to such objects, by ladies of fortune and leisure, their neighbours, even under the discouraging circumstances of having no guide to direct their exertions;—so strongly were they impelled by a wish to do good. I cannot entertain a doubt, that the number of such benevolent and amiable gratuitous teachers of the indigent Deaf and Dumb, will be greatly increased, when rational and easy means, of being so useful, are
pointed

pointed out to them. And there is ample room for all they can do, in this field of usefulness, as that Institution so honourable to our age and country, "THE ASYLUM FOR EDUCATING THE DEAF AND DUMB CHILDREN OF THE POOR," does not admit any on the charitable foundation till they are nine years old. The reason for fixing upon this age, was not any idea that it was the earliest at which regular education could be advantageously begun. But, *five years* being deemed, generally speaking, sufficient to accomplish that course of instruction thought most essential to such children, destined to earn their bread, by the labour of their hands; and, *fourteen* being the earliest age at which they could be apprenticed, it was judged best, for the œconomical purposes of the Institution,

not

not to receive them before the age of nine years.

It will not now be necessary to enlarge upon the second question: "What length of time will be required to complete the education of a deaf scholar?" For, having just said, that, generally speaking, *five years* has been deemed sufficient to accomplish that course of instruction deemed most essential to children destined to earn their bread by the labour of their hands; it is easy to infer, what length of time will be necessary to accomplish a more finished education. But, that I may not be misapprehended, I will state precisely what I understand by an education most essential to deaf children of the class mentioned.—I deem it essential, that they should have such a knowledge of language as to enable them to express their ideas, on common occasions:

to

to understand the commands or directions it may be necessary to give them in ordinary cases, &c. to read with intelligence, the precepts, the examples, and the promises, which are contained in the Scriptures, particularly the New Testament:—that they should write a good hand, spell correctly the words they use, and understand the principal rules of arithmetic. When I say that these acquirements may be attained in *five years*, I mean to state *that*, as the *shortest* time; even where the capacity of the learner is good.

It is, then, superfluous to observe that, where the mind is intended to be enlarged by a system of general information and science, a proportionably longer time must necessarily be required for its accomplishment.

OF THE VOCABULARY AND PLATES.

It remains, only, to say a few words of the Vocabulary, and of the Plates for its illustration:—of the *Vocabulary* it has been already said, (*page 94,*) that it embraces only the names of objects most commonly required to be named; it cannot, therefore, be any disappointment to the reader to find it comprehending nothing like a complete list of the substantives in the language.

The order of learning it is, agreeably to what has been observed above, (*page 89,*) according to the proximity and obviousness of the objects.

The *Plates* speak for themselves, as the means of giving significance to the *names* of the objects they represent. They are, moreover, both amusing and useful in our colloquial exercises:

exercises: and they are purposely placed without any numeral reference to the Vocabulary, the more effectually to engage the attention and exercise the memory of the learner. In the execution, fidelity has been considered of more importance than elegance. It was my injunction, all along, to the artist, to avoid repetition; nevertheless, this has not been altogether complied with, owing to the great variety of subjects which are more or less connected with each other.

THE END.

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